YEDİTEPE UNIVERSITY
FACULTY OF MEDICINE
PHASE II
ACADEMIC PROGRAM BOOK
2021 – 2022

Student's;
Name : .....
Number : .....

YEDİTEPE UNIVERSITY

FACULTY OF MEDICINE
PHASE II

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(TEACHING YEAR 2021 – 2022)

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YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

AIM OF MEDICAL EDUCATION PROGRAM

*"Consensus Commission Report" based on draft compiled at "*Workshop for Revision of Aim and Outcomes of Medical Education Program at Yeditepe University Faculty of Medicine*"

AIM

The aim of medical education program ***is to graduate physicians*** who

1.0 **are aware of** the local and global health issues
2.0 **have acquired competence** in knowledge, skills and attitudes to manage and provide primary health care service
3.0 **know**, **apply** and **care** for ethical principles of the medical profession
4.0 **keep up with** current knowledge at national and international level
5.0 **are capable of** systematical thinking
6.0 **are** investigative and questioning
7.0 continually **renovate** and **improve** themselves
8.0 **are capable of** teamwork
9.0 **use** technology competently in medicine and related areas
10.0 **have** effective communication skills
11.0 **have** community leadership qualifications

YEDİTEPE UNIVERSITY FACULTY OF MEDICINE

PROGRAM OUTCOMES OF MEDICAL EDUCATION *, **

Abbreviations: PO: Program Outcomes, POD: Program Outcomes Domain, PODG: Program Outcomes Domain Group

PODG.1. Basic Professional Competencies

POD.1.1. Clinical Competencies

PO.1.1.1. ***values*** preventive health services, ***offers*** primary prevention (i.e. prevention of diseases for the protection of health), secondary prevention (i.e. early diagnosis and treatment) tertiary prevention (i.e. rehabilitation) and quaternary prevention (i.e. prevention of excessive and unnecessary diagnosis and treatment) services, ***provides*** consultancy on these issues.
PO.1.1.2. ***employs*** a patient-centered approach in patient management.
PO.1.1.3. ***recognizes*** most frequently occurring or significant clinical complaints, symptoms, signs, findings and their emergence mechanisms in clinical conditions.
PO.1.1.4. ***takes*** medical history from the applicant himself/herself or from the individual's companions.
PO.1.1.5. ***does*** general and focused physical and mental examination.
PO.1.1.6. ***interprets*** findings in medical history, physical and mental examination.
PO.1.1.7. ***employs*** diagnostic procedures that are used frequently at the primary health care level.
PO.1.1.8. ***selects*** tests that have evidence-based high efficacy at the primary health care level and ***interprets*** results.
PO.1.1.9. ***makes*** clinical decisions using evidence-based systematic data in health care service.
PO.1.1.10. ***performs*** medical interventional procedures that are used frequently at the primary health care level.
PO.1.1.11. ***manages*** healthy individuals and patients in the context of health care services.
PO.1.1.12. ***keeps*** medical records in health care provision and ***uses*** information systems to that aim.

POD.1.2. Competencies related to Communication

PO.1.2.1. throughout his/her career, ***communicates*** effectively with health care beneficiaries, co-workers, accompanying persons, visitors, patient's relatives, care givers, colleagues, other individuals, organizations and institutions.
PO.1.2.2. ***collaborates*** as a team member with related organizations and institutions, with other professionals and health care workers, on issues related to health.
PO.1.2.3. ***recognizes*** the protection and privacy policy for health care beneficiaries, co-workers, accompanying persons and visitors.
PO.1.2.4. ***communicates*** with all stakeholders taking into consideration the socio-cultural diversity.

POD.1.3. Competencies Related to Leadership and Management

PO.1.3.1. ***manages*** and ***leads*** within the health care team in primary health care organization.
PO.1.3.2. ***recognizes*** the principles of health management and health sector economy, models of organization and financing of health care services.
PO.1.3.3. ***recognizes*** the resources in the health care service, the principles for cost-effective use.

POD.1.4. Competencies related to Health Advocacy

PO.1.4.1. ***recognizes*** the health status of the individual and the community and the factors affecting the health, ***implements*** the necessary measures to prevent effects of these factors on the health.
PO.1.4.2. ***recognizes*** and ***manages*** the health determinants including conditions that prevent access to health care.

POD.1.5. Competencies related to Research

PO.1.5.1. ***develops***, ***prepares*** and ***presents*** research projects

POD.1.6. Competencies related to Health Education and Counseling

PO.1.6.1. ***provides*** consultancy services and ***organizes*** health education for the community to sustain and promote the health of individual and community**.**

PODG.2. Professional Values and Perspectives

POD.2.1. Competencies related to Law and Legal Regulations

PO.2.1.1. ***performs*** medical practices in accordance with the legal framework which regulates the primary health care service.

POD.2.2. Competencies Related to Ethical Aspects of Medicine

PO.2.2.1. ***recognizes*** basic ethical principles completely, and ***distinguishes*** ethical and legal problems.

PO.2.2.2. ***pays importance to*** the rights of patient, patient's relatives and physicians, and ***provides*** services in this context.

POD.2.3. Competencies Related to Social and Behavioral Sciences

PO.2.3.1. ***relates*** historical, anthropological and philosophical evolution of medicine, with the current medical practice.

PO.2.3.2. ***recognizes*** the individual's behavior and attitudes and factors that determine the social dynamics of the community.

POD.2.4. Competencies Related to Social Awareness and Participation

PO.2.4.1. ***leads*** community with sense of responsibility, behavior and attitudes in consideration of individual behaviors and social dynamics of the community, and if there is a necessity, ***develops*** projects directed towards health care services.

POD.2.5. Competencies Related to Professional Attitudes and Behaviors

PO.2.5.1. ***displays*** a patient-centered and holistic (biopsychosocial) approach to patients and their problems.

PO.2.5.2. ***respects*** patients, colleagues and all stakeholders in health care delivery.

PO.2.5.3. ***displays*** the proper behavior in case of disadvantaged groups and situations in the community.

PO.2.5.4. ***takes*** responsibility for the development of patient safety and healthcare quality.

PO.2.5.6. ***evaluates*** own performance as open to criticism, ***realizes*** the qualifications and limitations.

PODG.3. Personal Development and Values

POD.3.1.Competencies Related to Lifelong Learning

PO.3.1.1. ***embraces*** the importance of lifelong self-learning and ***implements***.

PO.3.1.2. ***embraces*** the importance of updating knowledge and skills; ***searches*** current advancements and ***improves*** own knowledge and skills.

PO.3.1.3. ***uses*** English language at least at a level adequate to follow the international literature and to establish communication related to the profession.

POD.3.2. Competencies Related to Career Management

PO.3.2.1. ***recognizes*** and ***investigates*** postgraduate work domains and job opportunities.

PO.3.2.2. ***recognizes*** the application requirements to postgraduate work/job domains, and ***distinguishes*** and ***plans*** any requirement for further training and work experience.

PO.3.2.3. ***prepares*** a resume, and ***recognizes*** job interview methods.

POD.3.3. Competencies Related to Protection and Development of Own Physical and Mental Health

PO.3.3.1. ***implements*** the rules of healthy living.

PO.3.3.2. ***displays*** appropriate behavior specific to work under stressful conditions.

PO.3.3.3. ***uses*** self-motivation factors.

INSTRUCTIONAL DESIGN of PRECLINICAL YEARS

In Phase I, II and III, the formation of committees is based on a thematic structure. This structure corresponds to organizational levels of human body such that macromolecule, organelle, cell, tissue, organ systems and finally introduction to pathogenesis.

- Phase I: Normal structure and function of human body at molecular, cellular, tissue and organ level.
- Phase II: Normal structure and function of human body at system and multi-system level, and introduction to pathogenesis.
- Phase III: Physiopathological and pathological processes in human body.

Besides this thematic structure, there is a continuous clinical skills education in Phase I, II and III, as “Introduction to Clinical Practice -I, -II and -III” courses.

Therefore, the core medical courses are;

- Phase I: MED 104 Basic Medical Sciences I, MED 102 Introduction to Clinical Practice I, MED 103 Anatomical Drawing,
- Phase II: MED 203 Basic Medical Sciences II, MED 202 Introduction to Clinical Practice II,
- Phase III: MED 302 Introduction to Clinical Sciences, MED 303 Introduction to Clinical Practice III.

The learning objectives of the phase include learning objectives of core courses. The learning objectives of committees include learning objectives of core courses’ components for the committee.

Phase II consists of five committees:

COMMITTEE I Cardiovascular System (6 weeks)
COMMITTEE II Respiratory System (6 weeks)
COMMITTEE III Gastrointestinal System (7 weeks)
COMMITTEE IV Nervous System (8 weeks)
COMMITTEE V Endocrine and Urogenital Systems (8 weeks)

YEDITEPE UNIVERSITY FACULTY OF MEDICINE CURRICULUM OF PHASE II 2021-2022

CODE		SECOND YEAR	W	T	A	L	Y	E
MED	203	Basic Medical Sciences II	39					53
MED	202	Introduction to Clinical Practice II	39					5
MED	XXX	Free Elective Course[1] (SS)	14					2
Total Credits								60

The curriculum applies to 2021-2022 educational term. The duration of educational term for each year is shown in the table as total number of weeks. ECTS credits are the university credits of the courses in Yeditepe University Faculty of Medicine Undergraduate Medical Education Program. 1 ECTS=30 hours of workload including independent study hours per average student. GPA and cGPA calculations are based on ECTS credits.

[1]Free Elective Courses. At least one free elective course offered by the Faculty of Medicine or other faculties must be selected in an academic year. Free elective courses provided by Faculty of Medicine in the first three years: MED 611 Medical Anthropology, MED 612 Creative Drama I, MED 613 Medical Humanities, MED 614 Personal Trademark Development, ,MED 615 Innovation Management, MED 616 Medical Management and New Services Design Skills, MED 619 Entrepreneurship and Storytelling Techniques for Business Purposes, MED 620 Art, Culture and Life Styles, MED 621 Epidemiological Research and Evidence Based Medicine, MED 622 Applications of Economics in Health Care, MED 623 Visual Presentation in Medicine, MED 627 Presentation of Medicine on Media, MED 628 Healthy Living, MED 629 Music and Medicine, MED 630 Health Law, MED 631 Creative Drama II, MED 632 Music Appreciation, MED 633 Communication with Hearing Impaired Patients in Turkish Sign Language, MED 634 Case Based Forensic Science,

[2]Common Courses. These courses are obligatory in all programs of the university. The university credit values of the common courses are as stated by the University Senate. Except for HUM 103, these courses are not to be included in the GPA and cGPA calculations. Courses on Turkish Language and Culture for Foreigners (AFYA). Based on the result of Turkish Language Proficiency Exam, instead of TKL 201 (FS) and TKL 202 (SS) courses, international students will be requested to take the required ones from the AFYA 101 (FS), AFYA 102 (SS), AFYA 201 (FS) and AFYA 202 (SS) courses, designed for them. Each of these courses have credits as Y=3 and E=5. These courses are not to be included in the GPA and cGPA calculations.

T: Theoretical, A: Application , L: Laboratory, Y: Yeditepe University Credit, E: ECTS Credit	**Minimum Degree Requirements**	
NC: Non-Credit Course, FS: Fall Semester, SS: Spring Semester, W: Weeks.	**ECTS**	**360**
Approval Date:	**Number of courses**	**53**

* Please see https://med.yeditepe.edu.tr/sites/default/files/curriculum_2021-22_ytf_tr.docx for more information.

DESCRIPTION and CONTENT of PHASE II

Normal structure and function at system and multi-system level, introduction to pathology.

Cardiovascular System, Respiratory System, Gastrointestinal System, Nervous System, Endocrine and Urogenital System, Introduction to Clinical Practice- II (ICP- II), Scientific Research and Project, Problem Based Learning, Elective Courses

Anatomy, Physiology, Biochemistry, Histology & Embryology, Microbiology, Immunology, Biophysics, Medical Biology, Pathology, Pharmacology, Biostatistics, Family Medicine, Medical Education, Elective Courses, Scientific Research and Project Course-II,

AIM and LEARNING OBJECTIVES of PHASE II

AIMS

1. to convey knowledge on biophysical, biological, anatomical, embryological, histological, physiological, biochemical, microbiological and immunological conditions of systems, introductory information on tissue damage and neoplasis related to systems, and basic knowledge at the introductory level for clinics**, to equip with** basic clinical skills (interventional or non-interventional) required for the practice of medical profession, and skills for making scientific research presentation

2. to convey complementary educational experiences by improving biopsychosocial approach medical practice

LEARNING OBJECTIVES

At the end of this phase, student should be able to:

KNOWLEDGE

1.0 explain basic medical knowledge for cardiovascular system, respiratory system, circulation, hemodynamics, urogenital system, gastrointestinal system, nervous system, endocrine system, immune system and immunologic response, biostatistics subjects and elective courses.

2.0 explain the operational principles, interactions and relation of the systems in the body.

3.0 of clinical conditions;

- 3.1. explain mechanisms of damages formed at molecular, cell, tissue, organ, system and multi-system level,
- 3.2. describe the structural changes caused,
- 3.3. list developmental progress in time.

4.0 Among factors that pose risk to individual and community health;

- 4.1. list biological agents,
- 4.2. explain their mechanisms of action and outcomes.

5.0 explain basic principles of evidence-based medicine applications.

6.0 know how to discuss scientific articles in the view of literature

7.0 comprehend the biopsychosocial approach in medicine.

8.0 know how to make presentation of a scientific research.

SKILLS

1.0 apply basic interventional and non-interventional processes for taking individual preventive measures, drug application and diagnosis or treatment.

2.0 apply basic laboratory technics and use equipment.

3.0 prepare a presentation of a scientific research

AIM and LEARNING OBJECTIVES of BASIC MEDICAL SCIENCES II (BMS-II) (MED 203)

AIM

To convey knowledge on biophysical, biological, anatomical, embryological, histological, physiological, biochemical, biostatistics, microbiological and immunological conditions of systems, introductory information on tissue damage and neoplasis related to systems, and basic knowledge at the introductory level for clinics, skills for scientific article presentation

LEARNING OBJECTIVES

At the end of this course, student should be able to:

KNOWLEDGE

1.0 explain basic medical knowledge for cardiovascular system, respiratory system, circulation, hemodynamics, urogenital system, gastrointestinal system, nervous system, endocrine system, immune system and immunologic response, biostatistics subjects.
2.0 explain the operational principles, interactions and relation of the systems in the body.
3.0 of clinical conditions;
  3.1. explain mechanisms of damages formed at molecular, cell, tissue, organ, system and multi-system level,
  3.2. describe the structural changes caused,
  3.3. list developmental progress in time.
4.0 Among factors that pose risk to individual and community health;
  4.1. list biological agents,
  4.2. explain their mechanisms of action and outcomes.
5.0 explain basic principles of evidence-based medicine applications.
6.0 know how to discuss scientific articles in the view of literature
7.0 know how to make presentation of a scientific research.
8.0 comprehend the biopsychosocial approach in medicine.

SKILLS

1.0. apply basic laboratory technics and basic medical examination.
2.0 prepare a presentation of a scientific research

DESCRIPTION of INTRODUCTION to CLINICAL PRACTICE (ICP MED 102, 202, 303)

AIM of ICP PROGRAM

The aim of Introduction to Clinical Practice Program is to equip the students with basic medical skills and attitudes, in areas such as history taking regarding to systems and in general, physical and mental examination in simulated environments in pre-clinical period and to give the students opportunity to develop skills by applying non –invasive or invasive procedures on the mannequins before encountering with real patients.

Description
ICP is a three year longitudinal course that aims to introduce students to the concepts and main elements of medical practice. It will also be an introduction to the medical profession as a whole and will provide a foundation for clinical practice. The course provides knowledge, cognitive and motor skills and experience in fundamental processes and aspects of medical practice. It involves the application of scientific theory, quality assurance and evidence-based best practice protocols.

Credit Facility:
This course has 5 ECTS credits for the first and third year students while it has 4 ECTS for the second year students and all of the students are required to pass this course in order to pass the year.

Content of the ICP I-II-III
First year medical students gain knowledge on First Aid approaches, develop skills in Basic Life Support, Patient/Casualty Transportation and Bandaging Techniques regarding to First Aid. They also acquire basic knowledge on communication and experience patient-doctor encounter with simulated patients (SP's)*.
The second years ICP Program consist of modules like handwashing, wearing sterile gloves, assessing vital signs, nasogastric intubation, bladder catheterization, intramuscular, subcutaneous, intradermal and intravenous injections as well as iv. catheterization.
In the third year medical students practice with SP's clinical skills like history taking and physical examination focused on body systems and in general and also mental examination They also gain clinical skills such as suturing techniques and Advanced Cardiac Life Support.

Clinical Skills Laboratory
The Clinical Skills Laboratory is designed for teaching and assessing students at undergraduate level (during the preclinical period from first-year to third year). The lab provides learners with the ideal setting to practice the clinical skills of history taking, physical examination, communication, and gives opportunities to practice invasive and non invasive procedural skills on mannequins.
Each OSCE room is equipped with video cameras and microphones to record the encounter. An observation area at the center of the lab allows faculty and students to observe the encounters live or view digital recordings for subsequent analysis.

***Simulated Patients (SPs)**
The simulated patient encounters provide transition of students from the classroom to standardized patient contact in safe environments.
Encounters with specially trained individuals, known as simulated patients (SPs), simulate specific cases in outpatient and emergency settings. The pool of SPs consist of adults, from various backgrounds.
Clinical cases are created through research and extensive training of the patients portraying these roles.

Assessment: The Assessment procedure of ICP is given in the Assessment Table in this booklet.

Rules for Attendance of the Students: Students are grouped into 4 and group lists are announced in the announcement board at the beginning of the year. Any changes to practical groups on a week by week basis, will only be considered in exceptional situations such as a medical one. Any changes must be requested by a petition along with relevant documentation to the course coordinator. Any change in sessions will only be accepted interchangeably with another student in another group based on availability of work spaces and course coordinator's discretion (based on evidence provided).
Students are required to follow the rules of professional ethics in the laboratory at any time.

When an OSCE is conducted both students and faculty members complete a written evaluation of the event for the improvement of the course and OSCE.

AIM and LEARNING OBJECTIVES of INTRODUCTION to CLINICAL PRACTICE II (ICP-II) (MED 202)

AIM

1. **To convey** hygienic skills (hand washing, sterile glove wearing) in working environment**,**
2. **To convey** measurement skills for basic vital findings**,**
3. **To equip with** basic interventional skills (nasogastric tube and urinary catheter application; intramuscular, intradermal and subcutaneous injection, intravenous cannulation)**.**

LEARNING OBJECTIVES

At the end of this phase, student should be able to:

KNOWLEDGE

1. **describe** the techniques of hand washing and sterile glove wearing in accordance with the skill procedure**.**
2. **describe** measurement of blood pressure with sphygmomanometer in adults in accordance with the skill procedure**.**
3. **count** nasogastric probe types, application indications, contraindications and the steps in application procedure**.**
4. **count** urinary catheter types, application indications, contraindications and the steps in application**.**
5. **count** application indications, contraindications and the steps in application procedure of intramuscular, intradermal and subcutaneous injections as well as intravenous cannulation**.**

SKILLS

1. **apply** hand washing and sterile glove wearing skill completely in accordance with the skill procedure**.**
2. **measure** blood pressure by adult sphygmomanometer completely in accordance with the skill procedure**.**
3. **perform** nasogastric probe application on an adult model in accordance with the skill procedure**.**
4. **perform** urinary catheter application in an adult woman and male model in accordance with the skill procedure**.**
5. **perform** intramuscular, intradermal and subcutaneous injection as well as intravenous cannulation applications in an adult model in accordance with the skill procedure**.**
6. **describe** the process to be carried out to the patient before any intervention**.**

ATTITUDE

1. **value** the importance of informed consent
2. **pay** attention to patient privacy

value the importance of not exceeding the limits of his/her own competency level.

AIM and LEARNING OBJECTIVES of SCIENTIFIC RESEARCH and PROJECT COURSE – II

AIM

The aim of Scientific Research and Project Course – II, is to equip second year medical students to discuss scientific articles in the view of literature and to make presentation of a scientific research.

ASSESSMENT PROCEDURE:

For the assessments of the medical students for the scientific research and project course - II, it is calculated out of 100 points; 25 points will be graded from abstract presentations, 62.5 points will be graded from whole article presentations and 12.5 points will be graded from your Small Group Study (SGS) performances.

The constraints of the small review assignment will be discussed in Small Group Study hours.

Scientific Research and Project Course-II course has 3% contribution to Term Score (TS).

The student list for small group studies will be announced during the first week of educational year. Please note that it is mandatory to attend to Small Group Study hours in the assigned group hours.

FREE ELECTIVE COURSES

Elective courses aim to add complementary educational experiences to the medical school curriculum in order to improve comprehension of biopsychosocial approach of medical students, besides offering an opportunity to extend knowledge of interest in specific domains.
The following courses (2 ECTS credits each) will be offered in Spring semester. Each student has to choose one of these elective courses. The selection and enrollment procedure will be announced by the phase coordinator.

Code	Subject		
MED 611	**Medical Anthropology**		
Goals	This course aims to provide, different perspectives of medical issues according to anthropological holistic approach for medical students. To present how social science interprets concepts of health, sickness, illness and disease. To show how culture bound symptoms can vary from culture to culture. To discuss all health problems are universal or cultural and how anthropology describes medical phenomenon by theoretically and methodologically.		
Content	To explain that what is anthropology? What is medical anthropology? What is the relationships between social science and medical? Why we need to be explain some concepts according to perspectives of medical anthropology? The meaning of symptoms: cultural bound symptoms, the personal and social meaning of illness, the stigma and shame of illness, What is the positioning of medical doctors for patients and caregivers; Doctor-Patient relations, patients associations, Biological Citizenship, Medicalized Selves, Biopolitics.		
Course Learning Outcomes	At the end of this course, the student should be able to • emphasize cultural patterns of health. • investigate how human behavior that lives in a society is affected by own cultural health patterns. • discuss case studies about how cultural phenomenon affects human and public health. • understand importance of health that is constructed within culture structure by human society. • examine universal definition of health “state of complete physical, mental and social well-being” culturally. • realize interaction between items of cultural system and health system basically; get into the level of knowledge, skills and attitudes		
Assessment		**NUMBER**	**PERCENTAGE**
	Assignments	1	100
	Total	1	**100**

Code	Subject		
MED 612	**Creative Drama**		
Goals	The aim of this course is the development of independence, creativity, self-control and problem-solving potential and the development of communication skills of medical students by using drama and creativity through improvisation of exercises		
Content	Discovering, learning and teaching approaches that are student-centered in a curiosity focused setting with various cognitive and active learning styles.		
Course Learning Outcomes	At the end of this course, the student should be able to • show drama skills in vocational areas benefiting from access to creativity, collaboration and empathy which are the ways of learning through play and improvisation.		
Assessment		**NUMBER**	**PERCENTAGE**
	In-Term Performance	1	25
	Midterm	1	25
	Final Examination	1	50
	Total		**100**

Code	Subject
MED 613	**Medical Humanities**
Goals	This course aims to offer a wide variety of subjects related with art, history, cultural values, social movements, philosophy and many other areas. Main targets of this course are to improve Professionalism and Communication Skills and to support the students to develop an understanding about human and his interaction with universe.

Content	Main concepts of professionalism such as altruism, accountability, excellence, duty, honor and integrity, respect for others and communication skills will be covered through the lectures of history of medicine in an anthropological concept, medicine in literature and visual arts, and cinemeducation.		
Course Learning Outcomes	At the end of this course, the student should be able to • gain an understanding of the history of medicine as one of social and cultural transformation in the conception of professionalism, disease and what constitutes illness and health through the centuries. • develop the skills to write an essay using primary source documents in the context of the history of medicine. • gain view of different reflections of medicine in literature and visual arts. • develop a point of view to use literature and visual arts as an imagination instrument of compassion, to tolerate ambiguity, to dwell in paradox, to consider multiple points of view. • develop better observational and interpretive skills, by using the power of visual arts to elicit an emotional response in the observer. • gain understanding about the main values and various dimensions of professionalism. • gain insight about his/her own values and develop humanistic values. • develop a deeper understanding of human being in various contexts. • gain understanding about the various factors which influence health in individual and community level. • gain understanding to use films as a comprehensive guide in medical practice. • reflect through films to improve their cognitive and emotional awareness.		
Assessment		**NUMBER**	**PERCENTAGE**
	Participation		10
	Assignments		40
	Reflective Writing	1	10
	Final Examination	1	40
	Total		**100**

Code	**Subject**		
MED 614	**Personal Trademark Development**		
Goals	The aim of this course is to equip the students with skills in creating personal image for successful business life and with appropriate behavior in social platforms.		
Content	Business Etiquette creation techniques and personal image methodologies with case studies.		
Course Learning Outcomes	At the end of this course, the student should be able to create personal brand for successful business life. use behavioral codes for business etiquette.		
Assessment		**NUMBER**	**PERCENTAGE**
	Participation	1	30
	Final Project	1	70
	Total		**100**

Code	**Subject**		
MED 615	**Innovation Management**		
Goals	The aim of this course is to convey to the students knowledge on innovative approaches for visionary life, describe the philosophy of futurism.		
Content	Strategies for futurism and applied case studies for personal innovation.		
Course Learning Outcomes	At the end of this course, the student should be able to use futuristic strategies to create innovative approaches. use innovative and creative thinking techniques in professional life.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm Exam	1	40
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and applications of them on MED areas & discussions after each presentation)	1	20
	Attendence and Participation (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)	1	10

	Final Project	1	30
	Total	8	**100**

Code	**Subject**		
MED 616	**Medical Management and New Services Design Skills**		
Goals	The aim of this course is to develop leadership skills to manage a team and organizational skills in the case of emergency and lack of crew. Moreover, empathy skills will be developed to create better relationship with the patients, coworkers and customers.		
Content	Leadership Styles, Skills needed in Med, Strategies for New Generation Leadership, Empathy Techniques, Problem Solving with Empathy, and Conciliation with Empathy.		
Course Learning Outcomes	At the end of this course, the student should be able to develop leadership skills to manage teams. use empathy techniques for conciliation with their patients and co-workers.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm Exam	1	30
	Project Assignment	1	30
	Final	1	40
	Total		**100**

Code	**Subject**		
MED 617	**Personal Brandmark Management**		
Goals	The aim of this course is to teach brand management, healthcare marketing and to explain the healthcare services management.		
Content	Healthcare marketing, Characteristics of health professionals and healthcare consumers, Initial barriers to healthcare marketing, healthcare markets, healthcare consumers, consumer behavior, factors in health services utilization, population health paradigm and management., branding as a strategy, brand equity, brand reputation management, and crises communications, strategies for managing brand equity, rebranding and repositioning, health communication, public relations, ethical and social responsibilities of healthcare marketing management in organizations and society.		
Course Learning Outcomes	At the end of this course, students will be aware of the basic concepts and issues in healthcare marketing; appreciate the necessity of healthcare marketing; understand the main responsibilities, capabilities and skills of managers; comprehend the strategic nature of healthcare marketing as of unique attributes of healthcare markets; the population health paradigm; branding as a strategy; health communication; public relations and emphasize the ethical and social responsibilities of healthcare marketing management in organizations and society.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm Exam	1	40
	Final Exam	1	60
	Total		**100**

Code	**Subject**		
MED 619	**Entrepreneurship and Storytelling Techniques for Business Purposes**		
Goals	This course aims to equip students with storytelling techniques to make smart decisions, communicate better, think creatively and use this modern technique to manage their professional relations.		
Content	Strategies for storytelling techniques and applications.		
Course Learning Outcomes	At the end of this course, the student should be able to • use storytelling techniques in workplace to make decisions, communicate better and think creatively.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	25
	Presentations and Reports (Interactive Team Work, Social Skills Development, based on subjects studied during classes and	1	25

	applications of them on MED areas & discussions after each presentation)		
	Attendence (Showing interest to classes, performance during discussion times, performance during pair works, attending classes etc.)		5
	Quiz ((Short quizzes to keep students updated about lectures, prepare them to midterm & final, based on subjects studied in the class, Essay or MCQ)	5	5
	Final Exam (MCQ, Fill in the Blanks, T/F Questions, mostly based on case studies)	1	40
	Total		100

Code	**Subject**		
MED 620	**Art, Culture and Life Styles**		
Goals	Healthcare members will have high level social status for their business life; and will join several international conferences. This course aims to develop their social and intellectual skills to make them global citizens with art, culture, fashion and life style knowledge.		
Content	Life Style Coaching for participants, Cultural Festivals Through Europe, Art Exhibitions and Movements, Sportive Life Coaching.		
Course Learning Outcomes	At the end of this course, the student should be able to • develop intellectual wealth and cultural knowledge. • change their life styles for better perspective. • increase quality of life. • establish work-life balance.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm	1	40
	Final Assignment	1	60
	Total		**100**

Code	**Subject**		
MED 621	**Epidemiological Research and Evidence Based Medicine**		
Goals	The aim is to provide understanding of epidemiological language and terminology by reading, examining and discussing various types of epidemiological research papers and to develop the desire and enthusiasm for epidemiological studies.		
Content	Different sessions for each type of epidemiological research will be held. The selected research types are case report, cross-sectional, case- control, cohort study, and randomized controlled trial.		
Course Learning Outcomes	At the end of this course, the student should be able to comprehend various types of epidemiological research. explain basic epidemiological terminology.		
Assessment		**NUMBER**	**PERCENTAGE**
	Participation		50
	Presentations		50
	Total		**100**

Code	**Subject**		
MED 622	**Application of Economics in Health Care**		
Goals	This course aims to teach the essentials of economics and its' core concepts' relevance with health-care.		
Content	Tools and concepts of traditional Microeconomics Theory, health production function, cost & benefit analysis, demand for health insurance and health care markets.		
Course Learning Outcomes	At the end of this course, the student should be able to • explain the applications of micro-economic theories in health related areas. • discuss the causes of market failure. • list the factors effecting the demand for health. • explain health insurance supply and demand. • analyse how health care market operates.		
Assessment		**NUMBER**	**PERCENTAGE**
	Mid-term Exam	1	35

	Quizzes, Homeworks		20
	Final		45
		Total	100

Code	Subject		
MED 623	**Visual Presentation in Medicine**		
Goals	This course aims to teach to design visual aids that are to be used in medical case presentations in computerized systems with Adobe CS Photoshop and Powerpoint programs.		
Content	Understanding of verbal & technological presentation methods/tools to be used in medical case presentations. Computerized design tools like Adobe CS Photoshop and PowerPoint will be taught in computer labs to participants.		
Course Learning Outcomes	At the end of this course, the student should be able to • recognize and applies main design principles • design visual materials • use Adobe CS Photoshop and PowerPoint in basic level • manage the presentation program PowerPoint • perform visual designs and presents projects using these programs • criticize the images used in the media		
Assessment		**NUMBER**	**PERCENTAGE**
	In-Term Draft Project Works	1	25
	Midterm	1	25
	Final Project	1	25
	Final Project Presentation	1	25
		Total	100

Code	Subject		
MED 627	**Presentation of Medicine on Media**		
Goals	This course aims to teach deep understanding to approaches & visual methods/tools available as community communication media in conveying medical knowledge. To analyze technical features and to develop an understanding of aesthetics behind. To develop skills in conveying messages presented via media tools.		
Content	Sensual and perceptual theories of visual communication. Analysis and reading the meaning of the images presented in the media as a PR tool.		
Course Learning Outcomes	At the end of this course, the student should be able to • recognize the meaning of the visual literacy as intellectual property • describe the physical features of the light and theory of vision • analyze the images with the help of sensual and perceptual theories such as Gestalt, Constructivism, Semiology and Cognitive Approach. • recognize the differences between advertising, journalism and public relations. • describe the historical and cultural stereotypes used in the media • interpret images in the media (such as typography, graphic design, infographics, photography, TV, computer, internet) in technical, historical, cultural, ethical and critical aspects.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm	1	40
	Final	1	60
		Total	100

Code	Subject
MED 628	**Healthy Living: The Milestones of the Life for Performance Management**
Goals	This course aims to support fitness practices & dietary habits of healthy life style for medical students. To introduce techniques for reducing stress with healthy living habits. To highlight the importance of superior physical and mental health status for a better job performance.

Content	In the content of this course; understanding physiology of the physical activities, risks and benefits of the regular physical activities, using fitness training as a treatment technique, effects of physical activities to reduce stress, the relation between dietary habits and health will have quite importance.		
Course Learning Outcomes	At the end of this course, the student should be able to • explain main exercise physiology • define main fitness terms • analyze main risks and benefits of exercising • relate health and eating habits • perform main fitness training techniques • manage the basic exercises necessary for healthy life • perform physical techniques which are frequently used in stress management • explain the relationship between health and nutrition • describe the principles of healthy eating • recognize exercise as a treatment method for common diseases in the community		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm (reading and discussing article as a group study)	1	25
	Homework (exercise agenda)	1	25
	Final (Case discussion as a group study)	1	50
		Total	100

Code	**Subject**		
MED 629	**Music and Medicine**		
Goals	This course aims to convey the past and current uses and utilities of music in medicine.		
Content	The connection of music and medicine throughout the historical development of antiquity and Middle Ages up until today. The place of music in medical practice after the transformations in the Age of Enlightenment and beyond.		
Course Learning Outcomes	At the end of this course, the student should be able to • explain the uses of medicine in the past and present. • describe the uses of music in clinical conditions, and before and after surgical treatment. • explain the effects of music before and after surgery • describe the types of music used in music therapy		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm	1	30
	Attendance and Active Participation	1	25
	Final Project		45
		Total	100

Code	**Subject**		
MED 630	**Health Law**		
Goals	The aim of the course is that students obtain a legal rationale, take ethical decisions from a legal perspective, act in a respectful way to patients' rights, legal risks and responsibilities.		
Content	The basic concepts of law will be introduced with a view towards health law. The legal nature of medical interventions, concepts of malpractice and complication will be explained. The fundamentals and consequences of legal and criminal liability will be emphasized and medical interventions showing ethical, and legal characteristics will be evaluated from a legal point of view.		
Course Learning Outcomes	At the end of this course, the student should be able to • analyze legislature and by-laws related to health law • distinguish branches and consequences of legal responsibility • in taking decisions about patients, help them to make their own decisions in a proper way by respecting their right to self-determination and their privacy. • take ethical decisions from a perspective of patients' rights and legal responsibility • identify legal risks in the developing areas of health law		
Assessment		**NUMBER**	**PERCENTAGE**
	Presentation	1	40

	Final Assignment	1	60
		Total	100

Code	Subject		
MED 631	**Creative Drama II**		
Goals	This course aims the development of body awareness, improvement of communication skills of students by creating an atmosphere where the students can explore the potential of their emotional intelligence.		
Content	In this class, the students will be searching for their abilities for self-representation and being visible in society and going into an active learning process by experiencing image theatre, invisible theatre, newspaper theatre and forum theatre techniques		
Course Learning Outcomes	At the end of this course, the student should be able to • build supportive relationships in group by improving personal cooperating skills. • recognize personal awareness, • explain and review the schemes of personal attitude, thought and feeling by playing games and different roles. • improve critical and creative ways of thinking skills, also improve skills for life-long learning which will be useful for professional life as well as personal life. • explore being visible and expressing oneself in front of spectators using games and storytelling techniques.		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm	1	25
	Performance evaluation	5	25
	Final EXAM		50
		Total	100

Code	Subject		
MED 632	**Music Appreciation**		
Goals	This course aims to clarify the structures underlying western classical music in order to understand and appreciate it consciously while considering a historical perspective. Furthermore it will enable the student to understand that it is the foundation of every genre (pop, rap, rock etc.) in western music culture.		
Content	The evolution of music starting as of medieval times, the birth of new musical rules and genres in the Renaissance and the Age of Enlightenment which in turn redefines the different usages of music and lies the foundation of modern compositional rules. The reflection of those in music genres of today.		
Course Learning Outcomes	At the end of this course, the student should be able to • define music's founding elements • explain the structural evolution of music within time • explain what the brain perceives under different conditions		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm	1	30
	Attendance and Active Participation	1	25
	Final Project	1	45
	Total		**100**

Code	Subject
MED 633	**Communication with Hearing Impaired Patients in Turkish Sign Language**
Goals	The aim of this course is to convey to the students sign language skills and basic vocabulary in order to enable them to communicate with hearing impaired patients.
Content	Short history of sign language, basic vocabulary, words, terminology and simple sentence building skills regarding patient doctor interview.

Course Learning Outcomes	At the end of this course, the student should be able to • tell the history of sign language • show the basic words in sign language • conduct patient doctor interview in sign language • understand the health problem of the hearing impaired patient • give information about the treatment in sign language • build sentences using basic vocabulary in sign language • develop personal characteristics such as compassion, tolerance for diversity and open mindedness • improve body language • gain understanding about the various factors which influence health in individual and community level		
Assessment		**NUMBER**	**PERCENTAGE**
	Midterm	1	40
	Final Examination	1	60
	Total		**100**

Code	**Subject**		
MED 634	**Case Based Forensic Sciences**		
Goals	This course aims to increase the awareness of students about forensic cases by presenting them as real case presentations through forensic sciences, where some of the patients that they will examine routinely in their professional lives are forensic cases.		
Content	In each lecture, brief introduction information about one of the basic forensic sciences will be given, and with the help of this forensic science, how the case is elucidated and how the process is managed, will be explained in the lectures.		
Course Learning Outcomes	At the end of this course, the student should be able to • give preliminary information about what the forensic sciences are, and their relationship with medicine and each other. • give examples an idea about the types of forensic cases they may encounter in their professional routine. • gain the awareness that every patient that they examine can turn into a forensic case. • explain the liability of healthcare professionals against forensic cases and what kind of problems both patients and healthcare professionals may encounter if they are omitted. • give preliminary information about the management process of the forensic case. • explain the importance of the holistic approach in the management of forensic cases • explain the importance of professionalization and coordination in forensic science.		
Assessment		**NUMBER**	**PERCENTAGE**
	Assignments and Presentation	1	50
	Final EXAM	1	50
		Total	100

A SHORT GUIDE for STUDENTS to PROBLEM-BASED LEARNING (PBL)

In Phase II besides the lectures, Problem Based Learning Sessions are implemented in the education program.
The principal idea behind PBL is that the starting point for learning should be a problem, a query, or a puzzle that the learner wishes to solve.
PBL is a learning method where students perceive their knowledge gaps, decide on learning issues and achieve these, while working in small groups on a case to solve a patient's problems.
So, PBL starts by a clinical case of a patient. While working on the patient's problems you will identify your learning needs and study these. During this whole process you will work with a group of 8-12 students and a tutor.

How it works?

You will be presented a patient case (scenario) that has some problems and will be asked to proceed according to the information and instructions that you will receive. You will not be informed about the topic of the case in advance but will face the problem when given to you in your first session- *just like a doctor does not know what patients he/she will see when starting the day*.
Scenarios will be given to you one page at a time. When you finish discussing a page you will be given the following page with additional information about the patient.
Each PBL case will be discussed over 3 sessions, 2 hours each. You will work in a group of 8-12 students with a tutor. One student elected by the group will work as the "scribe" (person who will write the discussed topics on the board). The scribe may change at every session, by group decision.
Each group will be given the same scenario but will work independently from each other.
The tutor working with you will NOT TEACH you but will only guide to on this exciting trip. He/she will ask you questions to guide you to the problems to be solved.
Your aim will be to find out the reasons, and in some cases, the solutions of the problems presented.
It is clear (and we know) that you do not have enough knowledge to understand and solve all the problems presented to you.
Here comes the aim of PBL: **you will thus recognize WHAT YOU DO NOT KNOW and WHAT YOU SHOULD LEARN.** In other words **you will identify your knowledge gaps and try to learn them**. These are called "**learning objectives**".
In order to facilitate and direct discussions and learning process all relevant points should be written on the board by the scribe. The board should be used as below (with examples):

Problems	**Hypotheses**	**Additional (Required) information**	**Learning issues (Learning objectives)**
Example	***Example***	***Example***	***Example***
Fever *Cough* *Pallor*	*Throat infection* *Pneumonia* *Anemia*	*Throat examination* *Chest examination* *Chest X-ray* *Blood count*	*Causes of fever* *How is body temperature controlled?* *Anatomy of the throat* *Anatomy of lungs* *What is anemia?*

The patient's problems will be listed under **"Problems**" column.
The possible causes/reasons/mechanisms of the patient's problems will be listed under "**Hypotheses**". You can suggest and write anything that comes to your mind- you will then try to find any facts or information that can support these hypotheses. Do not be shy to suggest anything. You will not be judged for those things that you suggest.
As you will not be provided with all information about the patient you will need more information (such as, the patient's fever, physical examination findings, laboratory data, etc.). You will thus ask the scribe to write down these on the board under "**Required Information**" heading. This means information that you want to learn about this particular patient.
During the course of these discussions you will recognize that you do not know and thus need to study and learn some topics/issues, which are called "**learning objectives**". The learning objectives will be written on the fourth column under this heading. These are the topics that you will study until the next session and present by then.
This will lead you to the second stage of PBL: learning the facts that ***you*** have decided to. You will have to **find and reach the required learning resources** (textbooks, journal articles, reliable internet sources, etc.) and **study** these in your **independent study time**. You will be given a list of possible learning resources for every discipline but you can find other sources in addition to them. However, make sure that these are reliable sources- especially web sources need cautiousness.
When you meet with your group and tutor in your second (and third) session, you will be asked to summarize the previous session, list the learning objectives and then present the knowledge that you had learned.
In this way every group member (students) will study and learn the objectives and these will be discussed during the session. There may be disagreements among students for some information reached. The group will discuss and come to a conclusion about it. The tutor will guide and moderate the group through this process- BUT WILL NOT TEACH. **The tutor will not be a resource person but a faculty member who will facilitate your search for correct knowledge**. ***It is YOU who will reach and learn the required topics***- the topics that you have identified as your learning objectives or knowledge gaps.
The ultimate aim of a PBL case is NOT to diagnose the patient but to learn the topics that you discover that you do not know. Although the case is a clinical problem, at this stage of your studies, you will have to focus on basic sciences. In other words, you will need/want to learn basic science topics (anatomy, physiology, biochemistry, microbiology, etc.) related to the patient's problems. **So you will learn basic sciences starting from a clinical case and thus appreciate why and where basic sciences are necessary and relevant**.
Other benefits of PBL that you gain are to:

- learn "how to learn"
- develop lifelong learning skills
- improve your communications skills
- state and defend positions with evidence and sound argument
- become more flexible in processing information and meeting obligations

● practice skills that you will need after your education
● improve your information literacy

Assessment: Your participation and contributions to the sessions will be assessed by your tutor. This will NOT be assessment of your knowledge but your participation in the sessions, taking part in discussions, suggesting hypotheses, contributions by making presentations, etc. The assessment form is given below. This will comprise 5 % of that committee score.

Online PBL First session flow
● Introducing yourselves ***(for the first session of the term)***
● Determination of group rules ***(for the first session of the term) (Google Jamboard will be used.)***
● Introducing the PBL Student Assessment Form to the students ***(for the first session of the semester) (It will be shown to the students by screen sharing by the tutor)***
● Warming Game
● Reader and writer selection
● Reading the scenario step by step ***(The scenario will be displayed to the students by sharing the screen by the instructor.) (The next page will not be shared until the previous page is read and the related questions are answered by the students.) (The pages of the scenario will be shared sequentially in the Google Classroom as PDF.)***
● Discussion ***(Writing hypotheses on Google Jamboard, bringing preliminary information to learning environment, reviewing hypotheses, etc.)***
● The tutor asks questions that lead students to their learning goals during the discussion ***(these are questions written in the instructor's copy of the scenario).***
● Setting learning goals by students ***(learning goals will be written on Google Jamboard by the writer)***
● Feedback ***(each group member's thoughts about themselves, the group, scenario, the instructor, PBL flow, PBL setting, etc.)***
Online PBL Second session flow
● Warming Game
● Discussion of the learning objectives determined in the previous session ***(via the Google Jamboard where the learning objectives were written in the previous session)***
● Reader selection
● Reading the scenario ***(The second session of the scenario will be screen shared and displayed to the students by the tutor.)***
● Discussing the psychosocial dimension of the case
● Filling out Tutor Evaluation Form by the students
● Feedback ***(each group member's thoughts about themselves, the group, scenario, the instructor, PBL flow, PBL setting, etc.)***

PBL STUDENT ASSESSMENT FORM*

Student Name	
Phase/Committee	
PBL Scenario Name	
Tutor Name	

INTERACTION WITH GROUP / PARTICIPATION TO GROUP	**Not observed**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**	**Total Point of the Part**
	0	**1**	**2**	**3**	**4**	**5**	
1. Starts discussion							
2. Contributes with valid questions and ideas							
3. Balances listening and speaking roles							
4. Communicates effectively in group work							
GAINING KNOWLEDGE	**Not observed**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**	**Total Point of the Part**
	0	**1**	**2**	**3**	**4**	**5**	
5. Determines valid learning issues							
6. Finds valid sources							
7. Makes independent research on learning issues							
8. Shows understanding of the concepts and relationships							
COMMUNICATION/SHARING KNOWLEDGE	**Not observed**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**	**Total Point of the Part**
	0	**1**	**2**	**3**	**4**	**5**	
9. Selects data valid for discussion and presentation							
10. Expresses ideas and knowledge clearly and in an understandable way							
11. Draws figures, diagrams clearly and in an understandable way							
12. Has always some additional information or data to present whenever needed							
PROBLEM SOLVING AND CRITICAL THINKING	**Not observed**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**	**Total Point of the Part**
	0	**1**	**2**	**3**	**4**	**5**	
13. Generates hypotheses independently							
14. Reviews hypotheses critically							
15. Integrates basic science and clinical concepts							
16. Describes the difference between normal and pathological conditions							
PROFESSIONAL ATTITUDE	**Not observed**	**Poor**	**Fair**	**Average**	**Good**	**Excellent**	**Total Point of the Part**
	0	**1**	**2**	**3**	**4**	**5**	
17. Is sensitive to psychosocial factors affecting patients							
18. Treats all group members as colleagues							
19. Accepts feedback properly							
20. Provides proper feedback to group members							
Total Score of the Student							

Student's attendance status for PBL sessions	**Session 1**	**Session 2**	**Session 3**
	Attend ( ) / Not attend ( )	Attend ( ) / Not attend ( )	Attend ( ) / Not attend ( )

If you have any other interpretation, or thought about the student's performance in PBL sessions that you want to say PBL Coordinators, please write here.	

Signature of the tutor	

*Assessment form should be filled in at the end of scenario (i.e. following the completion of two consecutive sessions).

SPECIFIC SESSIONS / PANELS

Introductory Session

Aim of the session:
The session provides basic information about Yeditepe University Faculty of Medicine Undergraduate Medical Education Program (YUFM/UG-ME) and the educational phase relevant to the students. This session orients the students to the program and the phase.

Objectives of the Session:
1. To provide basic information about the YUFM/UG-ME.
2. To provide basic information about the phase.
3. To provide essential information on social programs and facilities.

Rules of the Session:
1. The session will be held in two types, conducted by Phase Coordinator and Committee Coordinator, respectively.
2. The first type will be held once in the first week of the educational phase. The second type will be held at the beginning of each committee/.
3. Students should attend the session.

Implementation of the Session:
In the first type, Phase Coordinator will present brief information on the following topics:
- Organizational Chart of Yeditepe University Faculty of Medicine Undergraduate Medical Education Program (YUFM/UG-ME), Work Descriptions and Introduction of Committees/s/Members,
- Directives on YUFM/UG-ME,
- YUFM/UG-ME Program Outcomes
- Learning Objectives of the Phase
- Academic Program of the Phase
- Teaching and Learning Methods
- Learning Environments and Sources/Resources
- Attendance
- Elective Courses
- Assessment Procedure
- Grade Point Average, Cumulative Grade Point Average (GPA, cGPA) Calculation
- Pass/Fail Conditions
- Feedback of the Previous Year and Program Improvements
- Social Programs and Facilities

In the second type, Committee / Coordinator will present brief information on the following topics:
- Learning Objectives of the Committee
- Academic Program of the Committee
- Teaching and Learning Methods
- Learning Environments and Sources / Resources, References
- Attendance
- Assessment Methods and Question Distribution Table
- Committee / Score Calculation Method
- Pass / Fail Conditions
- Feedback of the Previous Year and Program Improvements
- Social Programs and Facilities

Committee Evaluation Session

Aim of the Session:

The aim of the session is to evaluate the committee educational program, with all its components, by the students and the committee coordinators. This session will contribute to the improvement of the educational program in general by giving the opportunity to identify the strengths of the committee educational program and revealing the areas which need improvement.

Objectives of the Program Evaluation Session are to;

- establish a platform for oral feedbacks in addition to the systematically written feedback forms
- give the opportunity to the students and the coordinators to discuss the committee period face to face
- allow the students to review the committee exam questions together with faculty members.

Process:

The total duration of the session is 90 minutes and the session consists of two parts. The first part (30 minutes) is dedicated to oral feedback by the students. All of the oral feedback will be recorded and reported by the committee coordination team. In the second part (60 minutes) committee exam questions will be reviewed and discussed by students and faculty.

Rules of the Committee/ Evaluation Session:

1. The **Committee/ Evaluation Session** will be held on the last day of each committee after the committee/ exam.
2. Students are required to attend the session.
3. The Committee/ coordinator will lead the session.
4. The faculty members who had contributed questions in the committee exam should attend the session.
5. Students must comply with the feedback rules while giving verbal feedback and all participants shall abide by rules of professional ethics.

Program Improvement Session

Aim:
The aim of this session is sharing the program improvements based on the evaluation of the educational program data, with the students and the faculty members.

Objectives:
1. To share the improvements within educational program with the students and the faculty members.
2. To inform the students and the faculty members about the processes of the program improvement
3. To encourage student participation in the program improvement processes.

Rules:
1. Program improvements session will be implemented once a year. The implementation will be performed at the begining of the spring semester.
2. Students are required to attend the session.
3. The phase coordinator will monitor the session. If necessary the dean, vice deans and heads of the educational boards will attend to the session.
4. All faculty members will be invited to the session.

Implementation:

Before the Session
1. Phase coordinator will report the results of the improvements of the educational program.
2. The program improvements report has three parts. The first part of the report includes improvements that have been completed, and those that are currently in progress. The second part of the report includes, improvements that are planned in medium term, and the third part of the report includes, improvements that are planned in long term.
3. The program improvements report also includes the program evaluation data (student feedbacks, faculty feedbacks, results of the educational boards meetings etc.) in use of improvements.

During the Session
4. The phase coordinator will present the program improvements report to the students and the faculty members.
5. Students can ask questions about, and discuss, the results of the program improvement.

Process: The total period of session is 30 minutes and has two parts. The first part (15 minutes) covers, presenting of the program improvement report. The second part (15 minutes) covers, students' questions and discussion.

After the Session
6. The program improvement brief will be published on the website of Yeditepe University Faculty of Medicine (http://med.yeditepe.edu.tr).

INDEPENDENT LEARNING

Description:
"Independent learning" is a process, a method and a philosophy of education in which a student acquires knowledge by his or her own efforts and develops the ability for inquiry and critical evaluation. It includes freedom of choice in determining one's learning objectives, within the limits of a given project or program and with the aid of a faculty adviser. It requires freedom of process to carry out the objectives, and it places increased educational responsibility on the student for the achieving of objectives and for the value of the goals (1).

Aim:
The aim of this instructional strategy is to develop the students' ability, to learn individually, so they are prepared for the classroom lessons, lectures, laboratory experiences and clinical practices, exams, professional life and have the abilities needed for lifelong learning.

Objectives:
With this instructional strategy, students will develop;
- the skills that will help them to learn independently.
- self-discipline in their work habits.
- their evidence based research skills by using reliable resources.
- their teamwork skills by studying together.
- their clinical skills as self-directed working in the clinical skills laboratory.

Rules:
1. All of the students will define independent learning process according to below algorithm.
2. All of the students will be required to fill out a form, which is a self-assessment form for the independent learning (methodology: timing, sources, strategy, etc.).
3. The students' academic performance and independent learning methodology will be analyzed comparatively, and feed-back on further improvements will be provided.

What a student should do for learning independently?
1. **Analyzing:** First you will need to analyze carefully, what your problems and weaknesses are. For example, if you are studying anatomy, is your weak area broadly upper limb, lower limb, or what?
2. **Addressing:** Once you've decided your specific problems, you can list them. Which one needs to be addressed urgently? Work out your priorities. Whatever your subject area is, don't be afraid to return to the basics if necessary. It may give you more confidence in the long run to ensure you have a proper understanding of basic concepts and techniques.
3. **Accessing:** If you need reliable information, or if you need to read about a subject and put it into context, a textbook may be the best place to start. However, the Internet may be helpful if you need very up-to-date information, specific facts, or an image or video etc. If you need an academic research article, reports or case studies for your topic, then a database (Pubmed etc.) would be the best option.
4. **Timing:** In the weekly syllabus you will see, a specific time called "independent learning hour" for your independent work. In addition to these hours, the students should also have their own time schedule for their study time at home.
5. **Planning:** Your next step will be to work out a realistic study-plan for your work. What goals could you literally set for yourself? Don't make them too ambitious but set minor goals or targets that you know you will be able to achieve without having to spend a very long time working on them. How many hours will you need to achieve them? How will you know when you've achieved them?
6. **Recording:** When you work independently, it's a good idea to keep a written record of the work you've done. This can help with further planning and also give a sense of achievement as well as provide something to include in a progress file. As time goes by you may surprise yourself with what you've been able to achieve. This could motivate you to keep going, as could increase your confidence, and even improve your results
7. **Reflecting:** Reflecting on what you've done can help you decide whether the activity was really effective, whether an alternative approach might be better on another occasion, whether you spent the right amount of time and whether you have achieved the target you'd set yourself.
8. **Improving:** Once you've achieved the target, the process of planning can start again. Your needs and priorities may have changed, so think about them and then set yourself to another target.

Reminder: For further information about the independent learning, please contact the Department of Medical Education.

Reference:
1. Candy, P. (1991) Self-direction for lifelong learning: a comprehensive guide to theory and practice. San Francisco: Jossey Bass.

For further reading useful resources to recommend to students:
- Burnapp, D. (2009). Getting Ahead as an International Student. London: Open University Press.
- Marshall, L. & Rowland, F. (1998) A Guide to learning independently. London: Open University Press.
- University of Southampton / UKCISA online resource 'Prepare for Success'

ASSESSMENT PROCEDURE

The Assessment Procedure of the Phase II covers exams and scores and their abbreviations that shown below.

1.0. Exams:
- Committee Exam (CE)
- Mid-term Exam (MTE)
- Final Exam (FE)
- Incomplete Exam (ICE)
- Make-up Exam (MUE)

2.0. Scores*:
- Committee Score (CS)
- Committees Mean Score (CMS)
- Introduction to Clinical Practice Score (ICPS)
- Anatomical Drawing Score (ADS)
- Common Compulsary Course Score (CCCSs)
- Elective Course Score (ECSs)
- Scientific Research and Project Course Score (SRPCS)
- Final Exam Score (FES)
- Incomplete Exam Score (ICES)
- Term Score (TS)

* All scores have a range of 0-100 points.

Assessment approaches, assessment methods and assessment tools, that related with the exam and score types, are shown below table.

Assessment Approaches	Assessment Methods	Question Types / Assessment Tools	Exams	Derived Scores
Knowledge-based Assessment	WE: Written Examination	MCQ: Multiple Choice Questions	CE, MTE, FE, ICE	CS, ICPS, FES, ICES, ECSs, SRPCS
		SbMCQ: Scenario-based MCQs	CE, MTE, FE, ICE	CS, ICPS, FES, ICES
		EQ: Essay Questions	CE	CS
		FSAQ: Fill-in-the-Blank Short Answer Questions	MUE	CS
Competency–based Assessment	OSCE: Objective Structured Clinical Examination	OSCE Checklist		ICPS
	OSPE: Objective Structured Practical Examination	OSPE Checklist		CS
	LPE: Laboratory Practical Exam	LPE Checklist		CS
Performance–based Assessment	PWPE: Review Writing and Presenting Evaluation	PWPE Checklist		ECSs
	AID: Anatomical Images Drawing			ADS
	PBL-P: Evaluation of PBL Student's Performance	PBL Student Evaluation Form		CS

Exams Information (MED 202, MED 203)	
CE	For the proportional correspondence of individual learning objectives, please see the committee's assessment matrix table/page.
MTE_{ICP}	MTE_{ICP} consists of MCQs to assess the theoretical part of the ICP program.
FE	FE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's question distribution table/page.
ICE	ICE consists of 200 MCQs. For the proportional contribution of each committee, please see the committee's question distribution table/page.
MUE_{IBS}	MUE will be held only twice in a term. MUE consists of FSAQs. The number of FSAQs is half of the relevant exam. MUE content will be developed by the coordination committees.

Scores Information (MED 202, MED 203, MED 103, HUM 103, TKL 201, TKL 202, HTR 301, HTR 302, Elective Courses)	
CS	The committee score is based on various question types/numbers and/or assessment tools (MCQ, SbMCQ or Checklists). Please see the committee's assessment matrix table/page for the specifications. Contribution of student's performance during PBL sessions to CSs of Committee II, III, IV and V is **5%.**
CMS	= Average of CSs
ICPS	= (40% MTE_{ICP}) + (60% Final OSCE)
ADS	= (70% AID_{AD}) + (30% FE_{AD})
CCCSs	= Score information will be announced by Course Coordinator.
ECSs	= Score information is shown pages of Elective Courses in the APB.
SRPCS	= Score information is shown at the assessment page of Scientific Research and Projects
FES	= Final Exam Score
ICES	= Incomplete Exam Score
TS *for students, who are exempted from FE*	= 97% of CMS + 3% of SRPCS
TS *for students, who are not exempted from FE*	= 97% of (60% of CMS + 40% of FES or ICES) + 3% of SRPCS

Pass or Fail Calculations of the Courses
Basic Medical Sciences I (MED 104)
Pass; *TS* **≥ *60***
Fail; *FES* **< *50*** *(barrier point), ICES* **< *50*** *(barrier point), or/and TS* **< *60***
The student is exempted from FE, if the CMS is **≥ *80*** *and all CSs are* **≥ *60***
The FE and ICE barrier point is not applied to the students whose all CSs are **≥ *60***
Introduction to Clinical Practice I (MED 102)
Pass; *ICPS* **≥ *60***
Fail; *ICPS* **< *60***
Anatomical Drawing (MED 103)
Pass; *ADS* **≥ *60***
Fail; *ADS* **< *60***

Common Compulsory Courses **(HUM 103, TKL 201, TKL 202, HTR 301, HTR 302, AFYA 101, AFYA 102)**
Pass; *CCCSs* ***≥ 50*** ***Fail;*** *CCCSs* ***< 50***
Elective Courses **(MED 611, MED 612, MED 613, MED 614, MED 616, MED 619, MED 620, MED 623, MED 627, MED 628, MED 632, MED 633)**

The Assessment Procedure of the Phase II will be announced and explained in the introductory session at the beginning of the academic year.

Definitions of the Assessment Methods and Question Types

MCQ consist of a question, followed by five plausible alternative responses from which the student has to select the correct one.

SbMCQ is a kind of multiple choice questions. That they test knowledge in a far more applied, in depth, sense. SbMCQ is based on a clinical, research or daily life scenario.

EQ is a written examination that requires an answer in a sentence, paragraph, or short composition.

FSAQ, Fill-in-the-Blank Short Answer Questions are typically composed of a brief prompt that demands a written answer that varies in length from one or two words to a sentence.

OE is a practice in many schools of medicine and disciplines, where an examiner poses questions to the student in spoken form. The student has to answer the question in such a way as to demonstrate sufficient knowledge of the subject in order to pass the exam.

OSCE describes a form of competency-based assessment used to measure a student's clinical competence. During an OSCE, students are observed and evaluated as they go through a series of stations in which they interview, examine and treat simulated patients who present with some type of medical problem.

OSPE is used as an objective instrument for assessment of laboratory exercises in preclinical sciences. It was adapted from the objective structured clinical examination (OSCE). OSPE is implemented in similarly conditions with OSCE.

LPE is included as it has been a traditional assessment format in many school of medicine – particularly in disciplines such as anatomy, physiology, pathology and biology. Various local terms are used to describe this Assessment method including 'Spot', 'Steeplechase', 'Timed stations' or 'Bellringer'.

Grades

A letter grade is given to the students as a success grade, from the numerical values of the grades given by the relevant teaching staff for each course they take, taking into account the practice, laboratory and similar studies in the semester and examinations and academic activities.
Grades and Letter grades are shown for MED coded courses* in the following table:

Grades	Letter Grades
90-100	AA
80-89	BA
70-79	BB
65-69	CB
60-64	CC
59 or less	FF (Fail in the context of "Pass or Fail Calculations of the Courses" table pp.31)
0	FA (Fail due to nonattendance to the courses)

* Please see https://med.yeditepe.edu.tr/tr/mezuniyet-oncesi-tip-egitimi for more information.

EXAM RULES

- **Seating-** Students will be seated by the exam observers or proctors. Students are not allowed to change their seats without permission.
- **Electronics** – During examinations or tests, students are prohibited from using electronic devices or any other means of communication and recording that have not been approved beforehand. All electronic devices are prohibited. Anyone who fails to comply with these regulations may be charged with academic fraud.
- **Absence** – No additional time will be given to students who are absent for part of the exam, regardless of the reason for their absence.
- **Scratch Paper** – Students are not allowed to bring scratch paper into the exam room.
- **Meaning of Questions** – Students may not consult the supervisor as to the meaning of any question.
- **Signature** – Students must sign their multiple-choice answer sheets and/or written-answer sheets.
- **Other activities requiring disciplinary action**-
    - Students must not give or receive assistance of any kind during the exam.
    - Gaining access to exam questions before the exam.
    - Using an unauthorized calculator or other mechanical aid that is not permitted.
    - Looking in the exam book before the signal to begin is given.
    - Marking or otherwise writing on the exam book or answer sheet before the signal to begin is given.
    - Making any changes, additions, deletions or other marking, erasing or writing on the exam book or answer sheet after the time for the exam has expired.
    - Having access to or consulting notes or books during the exam.
    - Looking at or copying from another student's paper.
    - Enabling another student to copy from one's paper.
    - Talking or otherwise communicating with another student during the exam or during the read through period.
    - Disturbing other students during the exam.
    - Consulting other persons or resources outside the exam room during the exam.
    - Copying questions or answers either on paper or with an electronic device to take from the exam room.
    - Taking an exam book or other exam materials from the exam room.
    - Taking an exam in place of another student.
    - Arranging to have another person take an exam for the student.
    - Disobeying to the conduct of supervisor during the exam.
    - Disclosing the contents of an exam to any other person.
    - Failing to remain in the exam room for a given period of time by the supervisors.
    - Failing to follow other exam instructions.

Those students found to have committed academic misconduct will face administrative sanctions imposed by the administration of Yeditepe University Faculty of Medicine according to the disciplinary rules and regulations of the Turkish Higher Education Council (YÖK) for students (published in the Official Journal on August 18th, 2012). The standard administrative sanctions include, the creation of a disciplinary record which will be checked by graduate and professional life, result in grade "F" on the assignment, exams or tests or in the class. Students may face suspension and dismissal from the Yeditepe University **for up to one school year**. In addition, student may lose any academic and nonacademic scholarships given by the Yeditepe University **for up to four years**. The appropriate sanctions are determined by the Yeditepe University administration according to egregiousness of the Policy violation.

WEEKLY COURSE SCHEDULE and LOCATIONS* (MED 203, MED 202)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
09:00-09:50	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)
10:00-10:50	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)
11:00-11:50	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)
12:00-12:50	MED 203 ((B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 310)	MED 203 (B 311)
13:00-13:50					
14:00-14:50	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 202**** (Base Floor 442)	Elective Course (SPRING)
15:00-15:50	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 202**** (Base Floor 442)	Elective Course (SPRING)
16:00-16:50	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 202**** (Base Floor 442)	Elective Course (SPRING)
17:00-17:50	MED 203 (B 311)	MED 203 (B 311)	MED 203 (B 311)	MED 202**** (Base Floor 442)	Elective Course (SPRING))

COURSE CODES:	**COURSES and LOCATIONS**
MED 203	Basic Medical Sciences II (B 311) or Laboratories**
MED 202	Introduction to Clinical Practice II (CSL)*** or (B 311)

ELECTIVE COURSES CODES:

MED 611 Medical Anthropology
MED 612 Creative Drama
MED 613 Medical Humanities
MED 614 Personal Trademark Development
MED 615 Innovation Management
MED 616 Medical Management and New Services Design Skills
MED 617 Personal Brandmark Management
MED 619 Entrepreneurship and Storytelling Techniques for Business Purposes
MED 620 Art, Culture and Life Styles
MED 621 Epidemiological Research and Evidence Based Medicine
MED 622 Application of Economics in Health Care
MED 623 Visual Presentation in Medicine
MED 627 Presentation of Medicine on Media
MED 628 Healthy Living: The Milestones of the Life for Performance Management

CLASSES

B 311	Ground Floor
Elective Course Classes	Will be announced later

***All these places will be used during the next face to face education process**

**** MED 203 Laboratory sessions will be held at the laboratories of related departments:**
Physiology Laboratory: Room Number 448, Base Floor, and Room Number: 934, 5th Floor,
Histology and Embryology Laboratory: Room Number 929-930, 5th Floor

Anatomy Laboratory: C0547 and 3108 Cadaver Room, Ground Floor (-1)
Microbiology Laboratory: Room Number: 934, 5th Floor,
Pathology Laboratory: Room Number: 929-930, 5th Floor, Medical Faculty Block

***** MED 202 Practical Lectures will be held at Clinical Skills Laboratory (CSL) 442, Ground Floor.**
****** CSL will be held on Thursday or/and Friday during fall semester, and Wednesday or /and Thursday during spring semester**

ACADEMIC CALENDAR 2021 – 2022

MED 203 BASIC MEDICAL SCIENCES II

COMMITTEE I CARDIOVASCULAR SYSTEM (6 Weeks)

Beginning of Committee:	September 12, 2021 Monday
End of Committee:	October 22, 2021 Friday
Committee Exam:	October 18-22, 2021 (Theoretical and Practical Exams)
Committee Exam Discussion:	October 22, 2021 Friday

COMMITTEE II RESPIRATORY SYSTEM (6 Weeks)

Beginning of Committee:	October 25, 2021 Monday
End of Committee:	December 3, 2021 Friday
Committee Exam:	November 29-December 3, 2021 (Theoretical and Practical Exams)
Committee Exam Discussion:	December 25, 2020 Friday
National Holiday:	**October: 29, 2021 Friday**
Commemoration of Atatürk:	**November 10, 2021**

COMMITTEE III GASTROINTESTINAL SYSTEM (7 Weeks)

Beginning of Committee:	December 6, 2021 Monday
End of Committee:	January 21, 2022 Friday
Committee Exam:	January 17-21, 2022 (Theoretical and Practical Exams)
Committee Exam Discussion:	January 21, 2022
New Year:	**January 1, 2021 Friday**

MIDTERM BREAK: JANUARY 24- FEBRUARY 4 2022

COMMITTEE IV NERVOUS SYSTEM (8 Weeks)

Beginning of Committee:	February 7, 2022 Monday
End of Committee:	April 1, 2022 Friday
Committee Exam:	March 28-April 1, 2022 (Theoretical and Practical Exams)
Committee Exam	Discussion: April 1, 2022 Friday
Physicians' Day:	**March 14, 2022, Monday**
National Holiday:	**April 23, 2022, Saturday**

COMMITTEE V ENDOCRINE and UROGENITAL SYSTEMS (8 Weeks)

Beginning of Committee:	April 4, 2022 Monday
End of Committee:	June 3, 2022 Friday
Committee Exam:	30 May, June 3, 2022 (Theoretical and Practical Exams)
Committee Exam Discussion:	June 3, 2022 Friday
Labor's Day:	**May 1, 2022 Saturday**
Feast of Ramadan:	**May2-4, 2022**
National Holiday:	**May 19, 2022 Thursday**

Make-up Exam:	June 12-14, 2022 Monday-Wednesday
Final Exam:	July 1, 2022 Friday
Incomplete Exam:	July 20, 2022 Wednesday

ELECTIVE COURSES-Spring 2020-2021

Introduction to Elective Courses	December 6, 2021	Thursday
Beginning of Elective Courses	February 11, 2022	Friday
Midterm Exam	March 25, 2022	Friday
Make-up Exam	May 23-27, 2022	Monday-Friday
Final Exam	June 6-17, 2022	Monday-Friday
Incomplete Exam	June 20-July 1, 2022	Monday-Tuesday

MED 202 INTRODUCTION to CLINICAL PRACTICE II (ICP-II)

Midterm Exam:	February 11, 2022	Friday
Make-up Exam:	June 3, 2022	Friday
Final Exam:	June 7-9, 2022	Tuesday-Thursday
Incomplete Exam:	June 24, 2021	Friday

THE COORDINATION COMMITTEE MEETINGS

1st Coordination Committee Meeting:	October 19, 2021	Tuesday
2nd Coordination Committee Meeting: (With student participation)	January 11, 2022	Tuesday
3rd Coordination Committee Meeting: (With student participation)	May 24, 2022	Tuesday
4th Coordination Committee Meeting:	July 5, 2022	Tuesday

RECOMMENDED TEXTBOOKS

NO	DEPARTMENT	TEXTBOOK	AUTHOR	PUBLISHER
1	ANATOMY	Gray's Anatomy for Students	R.L. Drake et al, 3rd Edition, 2014	Churchill Livingstone
		Last's Anatomy: Regional and Applied	Chummy S. Sinnatamby, 12th Edition	Churchill Livingstone
		A Textbook of Neuroanatomy	Maria Patestas, Leslie P. Gartner, 2nd Edition, 2016	Wiley-Blackwell
		Hollinshead's Textbook of Anatomy	Cornelius Rosse, Penelope Gaddum-Rosse, 5th Edition, 1998	Lippincott Williams & Wilkins
2	BIOCHEMISTRY	Textbook of Biochemistry with Clinical Correlations	Thomas M. Devlin	Wiley-Liss Publishing Company
		Harper's Illustrated Biochemistry	Robert K. Murray et al	Mc-Graw-Hill Companies
		Lehninger Principles of Biochemistry	David L. Nelson, Michael M. Cox	W.H. Freeman Publishing Company
3	BIOPHYSICS	Introductory Biophysics: Perspectives on the Living State	J.R. Claycomb, J.P. Tran	Jones & Bartlett Publishers
4	BIOSTATISTICS	Primer of Biostatistics	Stanton Glantz	Mc-Graw-Hill Companies
5	HISTOLOGY	Junqueira's Basic Histology: Text and Atlas 13th Ed.	Anthony Mescher	Mc-Graw-Hill Companies
	EMBRYOLOGY	The Developing Human: Clinically Oriented Embryology, 10th Ed.	Keith L. Moore & T. V. N. Persaud	Saunders
6	IMMUNOLOGY	Basic Immunology: Functions and Disorders of the Immune System	Abul K. Abbas, Andrew H. H. Lichtman, Shiv Pillai, 5th edition,.2015	Elsevier
7	MEDICAL BIOLOGY	Molecular Biology of the Cell	Bruce Alberts et al	Garland Science
8	MEDICAL MICROBIOLOGY	Medical Microbiology: with Student Consult	P. R. Murray et al	Saunders
9	PATHOLOGY	Basic Pathology, 10e	Vinay Kumar MBBS MD et al. 2017 (ISBN-13: 978-0323353175)	Elsevier
10	PHARMACOLOGY	Goodman & Gilman's The Pharmacological Basis of Therapeutics	L.L. Brunton ed.	McGraw-Hill, New York,
		Basic and Clinical Pharmacology	B. G. Katzung	McGraw-Hill, New York
		Principles of Pharmacology	Golan, D.E et al	Lippincott Williams & Wilkins
11	PHYSIOLOGY	Guyton and Hall Textbook of Medical Physiology	John E. Hall, 13th Edition, 2016	Saunders
		Medical Physiology	Walter F. Boron, Emile L. Boulpaep 3rd Edition, 2016	Elsevier
		Human Physiology	Stuart Ira Fox, 14th Edition, 2015	McGraw-Hill Education

COMMITTEE I - CARDIOVASCULAR SYSTEM

DISTRIBUTION of LECTURE HOURS
September 13 - October 22, 2021
COMMITTEE DURATION: 6 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	13	5Grx2H	23
	BIOCHEMISTRY	12	2H	14
	BIOPHYSICS	8	0	8
	BIOSTATISTICS	2	0	2
	HISTOLOGY & EMBRYOLOGY	11	5Grx2H	21
	IMMUNOLOGY	3	0	3
	MEDICAL BIOLOGY	4	0	4
	MEDICAL MICROBIOLOGY	9	10GrX1H	19
	PATHOLOGY	7	0	7
	PHYSIOLOGY	34	10 GrX1H 1GX2H 1GX1H	47
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	2	5GrX3H	17
	PBL	6	0	6
	TOTAL	**110**	**60**	**169**
	INDEPENDENT LEARNING HOURS			75

OTHER COURSES

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	1H	5 GrX 3H	16

Coordination Committee	**Head**	Bayram YILMAZ, PhD, Prof.
	Secretary	Alev CUMBUL, PhD, Assist. Prof.
	Member	Mehtap KAÇAR, MD, PhD, Prof.
	Member	Akif MAHARRAMOV, PhD, Assist. Prof.

COMMITTEE I - CARDIOVASCULAR SYSTEM
AIM and LEARNING OBJECTIVES

AIMS

1. To convey knowledge about biophysical, biological, anatomical, embryological, histological, physiological and biochemical properties of cardiovascular system,
2. To convey knowledge on hemodynamics of cardiovascular system,
3. To convey information about electrical activity and functional activity of heart by defining all basic parameters,
4. To convey information about cardiovascular system anatomy
5. To convey basic, general knowledge about immunology,
6. To convey basic, general knowledge about microbiology and information about the structural/biological features and pathogenesis of fungi,
7. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

At the end of this committee, student should be able to:

1.0. For cardiovascular systems;
- 1.1. explain biophysical changes,
- 1.2. associate with the clinical reflections.
- 1.3. to convey basic knowledge about biostatistics

2.0. For cardiovascular system;
- 2.1. explain biological characteristics of the system,
- 2.2. associate with the clinical reflections.

3.0. For cardiovascular system;
- 3.1. describe their anatomy,
- 3.2. associate with adjacent tissues and organs,
- 3.3. explain their functional and clinical reflections.

4.0. For thorax and diaphragm
- 4.1. describe their anatomy,
- 4.2. associate with adjacent tissue and organs,
- 4.3. explain their functional and clinical reflections.

5.0. Describe of development of Neck and Pharyngeal Archs and Anomalies

6.0. For cardiovascular system;
- 6.1. explain developmental stages of heart,
- 6.2. explain developmental stages of arteries, veins and capillaries,
- 6.3. associate the relation between major birth abnormalities and developmental process.
- 6.4. explain the histological properties of heart
- 6.5. explain the histological features of arteries, veins and capillaries

7.0. For lyphoreticular System and blood
- 7.1. explain the histological properties of Lyph organs
- 7.2. explain the histological features of Blood

8.0. explain hemodynamics of cardiovascular system and electrical activity of heart by biophysical mechanisms.

9.0 describe the structure, functions, synthesis and degradation of hemoglobin.

10.0 describe erythrocyte-specific metabolisms.

11.0 describe formation, differentiation and functions of blood cells.

12.0 describe physiopathology of diseases, such as anemia, leukemia, hemophilia.

13.0 describe heart rhythm, cardiac output and cardiac cycle.

14.0 describe nervous (autonomous) control of cardiovascular system.

15.0 explain functions of cardiovascular system.

16.0 explain functions and dynamics of circulatory system.

17.0 explain measurements of hematocrit, blood group analysis, blood pressure and ECG methods.

18.0 For immune system;
- 18.1 explain development and differentiation of immune cells,
- 18.2 relate changes with diseases,
- 18.3 describe the properties of immune response.

19.0 For hemodynamic changes;
- 19.1 explain mechanisms of development,

19.2 describe mechanisms for cellular damage,
19.3 describe pathologies occurring due to cell and tissue damage.

20.0 describe the factors that determine pathology as a basic science.

21.0 explain the factors of tissue damage

22.0 describe the pathological consequences and interactions of cellular injury on the cell and tissue morphology with examples.

23.0 describe examples of pathological consequences of immune response.

24.0 explain the factors that affect the clinical course and outcome of cell injury

25.0 list disorders resulting from hemodynamic changes.

26.0 describe how to discuss scientific articles in the view of literature

27.0 prepare a presentation of scientific research

28.0 for statistical decision
28.1 lists the types of the statistical hypothesis.
28.2 lists the types of errors in statistical decison making
28.3 explain the steps of a statistical hypothesis test

29.0 For human flora;
29.1 describe the flora,
29.2 explain its relation to clinical conditions.

30.0 describe the structural/biological features and pathogenesis of fungi.

31.0 explain case scenario related basic medical science topics in a clinical context.

COMMITTEE I - CARDIOVASCULAR SYSTEM
COMMITTEE I ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0-4.0, 31.0	ANATOMY	Dr. A. Panteli	14	5	5	24
8.0-10.0, 31.0	BIOCHEMISTRY	Dr. İ. Özden	11	4	4	19
1.0	BIOPHYSICS	Dr. A. Maharramov	9	4	4	17
28.0	BIOSTATISTICS	Dr. Ç. Keleş	2	1	1	4
	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	6	2	2	10
5.0-7.0, 31.0		Dr. A. Cumbul	4	2	2	8
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	3	1	1	5
2.0	MEDICAL BIOLOGY	Dr. T. İsbir Dr. D. Kıraç	4	1	1	6
29.0-30.0, 31.0	MEDICAL MICROBIOLOGY	Dr. Pınar Çırağil Dr. Nilgün Çerikçioğlu	8	3	3	14
19.0-25.0, 31.0	PATHOLOGY	Dr. A. Sav	6	3	3	12
8.0-17.0, 31.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	32	12	12	56
31.0	PBL		1	0	0	1
		TOTAL	**100**	**38/200#**	**38/200#**	**176**

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB POINTS
		LPE
3.0-4.0	ANATOMY	**30**
8.0-10.0	BIOCHEMISTRY	**5**
5.0-6.0	HISTOLOGY & EMBRYOLOGY	**15**
29.0-30.0	MEDICAL MICROBIOLOGY	**10**
8.0- 17.0	PHYSIOLOGY	**40**
	TOTAL	**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).
Total value of LPE is equal to 100 points

Committee Score (CS) = 95% of [90% CE (MCQ and SbMCQ) + 10% (LPE)] + 5% of PBL-P

Abbreviations:

MCQ: Multiple Choice Questions
SbMCQ: Scienario-based Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 38** out of 200 FE and ICE MCQs and SbMCQ will be from Committee I (Each question is 0.5 pt, equal value

COMMITTEE I - CARDIOVASCULAR SYSTEM
DISTRIBUTION of LECTURE HOURS
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	DISCIPLINE			
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	BIOCHEMISTRY	12	2H	14
	BIOPHYSICS	8	0	8
	BIOSTATISTICS	2	0	2
	HISTOLOGY & EMBRYOLOGY	11	5Grx2H	21
	IMMUNOLOGY	3	0	3
	MEDICAL BIOLOGY	4	0	4
	MEDICAL MICROBIOLOGY	9	10GrX1H	19
	PATHOLOGY	7	0	7
	PHYSIOLOGY	34	10 Grx1H 2H 1H	47
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	2	5GrX3H	17
	PBL	6	0	6
	TOTAL	**110**	**60**	**169**
	INDEPENDENT LEARNING HOURS			75

OTHER COURSES

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5H	5 GrX 3H	20

Coordination Committee	**Head**	Bayram YILMAZ, PhD, Prof.
	Secretary	Alev CUMBUL, PhD, Assist. Prof.
	Member	Mehtap KAÇAR, MD, PhD, Prof.
	Member	Akif MAHARRAMOV, PhD, Assist. Prof.

COMMITTEE I - CARDIOVASCULAR SYSTEM
AIM and LEARNING OBJECTIVES

AIMS

8. To convey knowledge about biophysical, biological, anatomical, embryological, histological, physiological and biochemical properties of cardiovascular system,
9. To convey knowledge on hemodynamics of cardiovascular system,
10. To convey information about electrical activity and functional activity of heart by defining all basic parameters,
11. To convey information about cardiovascular system anatomy
12. To convey basic, general knowledge about immunology,
13. To convey basic, general knowledge about microbiology and information about the structural/biological features and pathogenesis of fungi,
14. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

At the end of this committee, student should be able to:

18.0. For cardiovascular systems;
- 18.1. explain biophysical changes,
- 18.2. associate with the clinical reflections.
- 18.3. to convey basic knowledge about biostatistics

19.0. For cardiovascular system;
- 19.1. explain biological characteristics of the system,
- 19.2. associate with the clinical reflections.

20.0. For cardiovascular system;
- 20.1. describe their anatomy,
- 20.2. associate with adjacent tissues and organs,
- 20.3. explain their functional and clinical reflections.

21.0. For thorax and diaphragm
- 21.1. describe their anatomy,
- 21.2. associate with adjacent tissue and organs,
- 21.3. explain their functional and clinical reflections.

22.0 Desciribe of development of Neck and Pharyngeal Archs and Anomalies

23.0 For cardiovascular system;
- 23.1. explain developmental stages of heart,
- 23.2. explain developmental stages of arteries, veins and capillaries,
- 23.3. associate the relation between major birth abnormalities and developmental process.
- 23.4. explain the histological properties of heart
- 23.5. explain the histological features of arteries, veins and capillaries

24.0 For lyphoreticular System and blood
- 24.1. explain the histological properties of Lyph organs
- 24.2. explain the histological features of Blood

25.0 explain hemodynamics of cardiovascular system and electrical activity of heart by biophysical mechanisms.

26.0 describe the structure, functions, synthesis and degradation of hemoglobin.

27.0 describe erythrocyte-specific metabolisms.

28.0 describe formation, differentiation and functions of blood cells.

29.0 describe physiopathology of diseases, such as anemia, leukemia, hemophilia.

30.0 describe heart rhythm, cardiac output and cardiac cycle.

31.0 describe nervous (autonomous) control of cardiovascular system.

32.0 explain functions of cardiovascular system.

33.0 explain functions and dynamics of circulatory system.

34.0 explain measurements of hematocrit, blood group analysis, blood pressure and ECG methods.

32.0 For immune system;
- 32.1 explain development and differentiation of immune cells,
- 32.2 relate changes with diseases,
- 32.3 describe the properties of immune response.

33.0 For hemodynamic changes;
- 33.1 explain mechanisms of development,
- 33.2 describe mechanisms for cellular damage,
- 33.3 describe pathologies occurring due to cell and tissue damage.

34.0 describe the factors that determine pathology as a basic science.

35.0 explain the factors of tissue damage
36.0 describe the pathological consequences and interactions of cellular injury on the cell and tissue morphology with examples.
37.0 describe examples of pathological consequences of immune response.
38.0 explain the factors that affect the clinical course and outcome of cell injury
39.0 list disorders resulting from hemodynamic changes.
40.0 describe how to discuss scientific articles in the view of literature
41.0 prepare a presentation of scientific research
42.0 for statistical decision
- 42.1 lists the types of the statistical hypothesis.
- 42.2 lists the types of errors in statistical decison making
- 42.3 explain the steps of a statistical hypothesis test

43.0 For human flora;
29.1 describe the flora,
29.2 explain its relation to clinical conditions.
44.0 describe the structural/biological features and pathogenesis of fungi.
45.0 explain case scenario related basic medical science topics in a clinical context.

COMMITTEE I - CARDIOVASCULAR SYSTEM
COMMITTEE I ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs			
			CE	FE	IE	TOTAL
3.0-4.0, 31.0	ANATOMY	Dr. A. Panteli	14	5	5	24
8.0-10.0, 31.0	BIOCHEMISTRY	Dr. İ. Özden	11	4	4	19
1.0	BIOPHYSICS	Dr. A. Maharramov	9	4	4	17
28.0	BIOSTATISTICS	Dr. Ç. Keleş	2	1	1	4
	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	6	2	2	10
5.0-7.0, 31.0		Dr. A. Cumbul	4	2	2	8
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	3	1	1	5
2.0	MEDICAL BIOLOGY	Dr. T. İsbir Dr. D. Kıraç	4	1	1	6
29.0-30.0, 31.0	MEDICAL MICROBIOLOGY	Dr. Pınar Çırağil Dr. Nilgün Çerikçioğlu	8	3	3	14
19.0-25.0, 31.0	PATHOLOGY	Dr. A. Sav	6	3	3	12
8.0-17.0, 31.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	32	12	12	56
31.0	PBL		1	0	0	1
		TOTAL	**100**	**38/200#**	**38/200#**	**176**

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB POINTS
		LPE
3.0-4.0	ANATOMY	**30**
8.0-10.0	BIOCHEMISTRY	**5**
5.0-6.0	HISTOLOGY & EMBRYOLOGY	**15**
29.0-30.0	MEDICAL MICROBIOLOGY	**10**
8.0- 17.0	PHYSIOLOGY	**40**
	TOTAL	**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).
Total value of LPE is equal to 100 points

Committee Score (CS) = 95% of [90% CE (MCQ and SbMCQ) + 10% (LPE)] + 5% of PBL-P

Abbreviations:
MCQ: Multiple Choice Questions
SbMCQ: Scienario-based Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 38** out of 200 FE and ICE MCQs and SbMCQ will be from Committee I (Each question is 0.5 pt, equal value

COMMITTEE I - CARDIOVASCULAR SYSTEM
I. WEEK / 13– 17 Sep 2021 (Group 1 Online, Group 2 Online)

	Monday 13-Sep-2021	Tuesday 14-Sep-2021	Wednesday 15-Sep-2021	Thursday 16-Sep-2021	Friday 17-Sep-2021
09.00- 09.50	**Independent Learning**	**Lecture** Functions of Hemoglobin ***İnci Özden***	**Lecture** Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin ***İnci Özden***	**Independent Learning**	**Lecture** Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin ***İnci Özden***
10.00- 10.50	**Introductory Session** Introduction to Phase II Phase II Coordination Committee/ Introduction to Committee I Secretary of Committee	**Lecture** Functions of Hemoglobin ***İnci Özden***	**Lecture** Porphin, Porphyrins, Heme, Hemoglobin, Structure of Hemoglobin ***İnci Özden***	***Lecture*** *Introduction to Pathology* ***Aydın Sav***	**Lecture** Synthesis of Hemoglobin, Disorders Concerning Synthesis of Hemoglobin ***İnci Özden***
11.00- 11.50	Lecture Introduction to Cardiovascular System ***Aikaterini Panteli***	**Lecture** Chambers of the Heart ***Aikaterini Panteli***	**Lecture** Leucocyte Circulation and Migration into Tissue ***Gülderen Yanıkkaya Demirel***	**Lecture** Histology of Circulatory Systems; Gn Spec. Arteries ***Aylin Yaba Uçar***	**Lecture** Great Vessels of the Heart ***Aikaterini Panteli***
12.00- 12.50	**Lecture** Pericardium and Outer Surface of the Heart ***Aikaterini Panteli***	**Lecture** Chambers of the Heart ***Aikaterini Panteli***	**Lecture** Functions of Blood ***Burcu Gemici Başol***	**Lecture** Histology of Circulatory Systems; Capillaries & Veins ***Aylin Yaba Uçar***	**Lecture** Major Vessels of the Body ***Aikaterini Panteli***
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Introduction to Medical Microbiology ***Pınar Çıragil***	**Lecture /** Scientific Research and Project Course - II Presentation of Scientific Research ***Deniz Kıraç***	**Lecture** Introduction to the First Aid Programmes ***Gökhan Gencer***	**Lecture** Erythrocyte ***Burcu Gemici Başol***	**Lecture** Leukocytes ***Burcu Gemici Başol***
15.00- 15.50	**Lecture** Sterilization and Disinfection ***Pınar Çıragil***	**Lecture /** Scientific Research and Project Course - II Presentation of Scientific Research ***Deniz Kıraç***	**Lecture** Basic Human Body ***Gökhan Gencer***	**Lecture** Erythrocyte ***Burcu Gemici Başol***	**Lecture** Leukocytes & Lymphocytes ***Burcu Gemici Başol***
16.00- 16.50	**Lecture** Thoracic Cavity & Mediastinum ***Aikaterini Panteli***	**Independent Learning**	**Independent Learning**	**Lecture** Scene Assessment ***Gökhan Gencer***	**Lecture** Introduction to Bioelectromagnetics Magnetic Field ***Akif Maharramov***
17.00-17.50	**Lecture** Thoracic Cavity & Mediastinum ***Aikaterini Panteli***	**Independent Learning**	**Independent Learning**	**Independent Learning**	**Lecture** Introduction to Bioelectromagnetics Electric Field ***Akif Maharramov***

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE I - CARDIOVASCULAR SYSTEM
II. WEEK / 20– 24 Sep 2021 (Group 1 Face to Face, Group 2 Online)

	Monday 20-Sep-2021	Tuesday 21-Sep-2021	Wednesday 22-Sep-2021	Thursday 23-Sep-2021	Friday 24-Sep-2021	
09.00- 09.50	**Independent Learning**	**Lecture** Regulation of Cardiac Function ***Bayram Yılmaz***	**Lecture** Blood Types and Transfusion Reactions ***Bayram Yılmaz***	**Lecture** Rhythmical Excitation of the Heart ***Bayram Yılmaz***	**Laboratory / Anatomy** Pericardium, Outer Surface, Chambers / Coronary Arteries And Cardiac Veins/ Great Vessels Of The Heart *Aikaterini Panteli* **Group 1**	
10.00- 10.50	**Independent Learning**	**Lecture** Regulation of Cardiac Function ***Bayram Yılmaz***	**Lecture** Blood Types and Transfusion Reactions ***Bayram Yılmaz***	**Lecture** Rhythmical Excitation of the Heart ***Bayram Yılmaz***	**Group 2**	
11.00- 11.50	**Lecture** Coronary arteries, Cardiac Veins, and Cardiac Conduction System ***Aikaterini Panteli***	**Lecture** Histology of Lymph Organs; General Aspects, Thymus and Lymph Node ***Aylin Yaba Uçar***	**Independent Learning**	**Lecture** Congenital Heart Anomalies ***Alev Cumbul***	**Group 3**	
12.00- 12.50	**Lecture** Coronary arteries, Cardiac Veins, and Cardiac Conduction System ***Aikaterini Panteli***	**Lecture** Histology of Lymph Organs; Spleen and MALT (Tonsils) ***Aylin Yaba Uçar***	**Independent Learning**	**Independent Learning**	**Group 4**	
13.00- 13.50	**Lunch Break**					
14.00- 14.50	**Lecture** Adaptations ***Aydın Sav***	**Lecture** Platelets and Coagulation ***Mehtap Kaçar***	**Lecture** Development of Circulatory Systems; Endocardial Tube Formation & Looping ***Alev Cumbul***	**Laboratory / Physiology** Hematocrit Determination and Blood Typing & Bleeding Time ***Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol***	**ICP / CSL:** Basic Life Support and Heimlich Maneuver ***Gökhan Gencer Cem Şimşek*** **Group A**	
15.00- 15.50	**Lecture** Adaptations ***Aydın Sav***	**Lecture** Platelets and Coagulation ***Mehtap Kaçar***	**Lecture** Development of Circulatory Systems; Septation ***Alev Cumbul***		***Gökhan Gencer Cem Şimşek*** **Group A**	**SRPC SGS** **Group B** ***Deniz Kıraç***
16.00- 16.50	**Independent Learning**	**Lecture** Introduction to Lymphatic System ***Aikaterini Panteli***	**Lecture** Basic Life Support and Heimlich Maneuver ***Gökhan Gencer***	**Independent Learning**		
17.00-17.50	**Independent Learning**	**Lecture** Circulation of Lymph ***Aikaterini Panteli***	**Lecture** Basic Life Support and Heimlich Maneuver ***Gökhan Gencer***	**Independent Learning**		

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COMMITTEE I - CARDIOVASCULAR SYSTEM
III. WEEK / 27 Sep– 01 Oct 2021 (Group 1 Online, Group 2 Face to Face)

	Monday 27-Sep-2021	Tuesday 28-Sep-2021	Wednesday 29-Sep-2021	Thursday 30-Sep-2021	Friday 01-Oct-2021
09.00- 09.50	**PBL Session**	**Lecture** Cardiac Arrhythmias ***Bayram Yılmaz***	**Lecture** Principles of Electrocardiography ***Bayram Yılmaz***	**Lecture** Microcirculation and the Lymphatic System ***Bayram Yılmaz***	**Lecture** Hyperemia & Congestion ***Aydın Sav***
10.00- 10.50		**Lecture** Cardiac Arrhythmias ***Bayram Yılmaz***	**Lecture** Electrocardiographic Interpretation of Cardiac Abnormalities ***Bayram Yılmaz***	**Lecture** Capillary Fluid Exchange, Interstitial Fluid, and Lymph Flow ***Bayram Yılmaz***	**Lecture** Hyperemia & Congestion ***Aydın Sav***
11.00- 11.50		**Lecture** Sampling, Data Collection and Data Processing ***E. Çiğdem Keleş***	**Lecture** Development of Head; Splanchocranium, Neurocranium ***Aylin Yaba Uçar***	**Lecture** Biophysics of Hemodynamics ***Akif Maharramov***	**Lecture** Nervous Regulation of the Circulation ***Bayram Yılmaz***
12.00- 12.50	**Independent Learning**	**Lecture** Statistical Decision Theory, Test of Hypothesis and Significance ***E. Çiğdem Keleş***	**Lecture** Development of Neck; Pharyngeal Arches and Anomalies ***Aylin Yaba Uçar***	**Lecture** Measurements of Different Hemodynamic Parameters ***Akif Maharramov***	**Lecture** Nervous Regulation of the Circulation ***Bayram Yılmaz***
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart ***Turgay İsbir***	**Independent Learning**	**Lecture** Degradation of Hemoglobin ***İnci Özden***	**ICP / CSL: Basic Life Support and Heimlich Maneuver** ***Gökhan Gencer Cem Şimşek*** **Group B**	**Lecture** Principles of Hemodynamics ***Burcu Gemici Başol***
15.00- 15.50	**Lecture** Biological Basis of Cardiovascular Diseases; Death Begets Failure in the Heart ***Turgay İsbir***	**Lecture** Fetal Circulation ***Aikaterini Panteli***	**Lecture** Degradation of Hemoglobin ***İnci Özden***	***Gökhan Gencer Cem Şimşek*** **Group B** / **SRPC SGS Group C** ***Deniz Kıraç***	**Lecture** Principles of Hemodynamics ***Burcu Gemici Başol***
16.00-16.50	**Lecture** Hemorheology ***Akif Maharramov***	**Lecture** Introduction to Bioelectromagnetics: Electromagnetic Field ***Akif Maharramov***	**Lecture** Immunology of Heart and Vessels ***Gülderen Yanıkkaya Demirel***		**Independent Learning**
17.00-17.50	**Lecture** Hemorheology ***Akif Maharramov***	**Lecture** Bioelectromagnetic Effects on the Heart ***Akif Maharramov***	**Lecture** Immunology of Heart and Vessels ***Gülderen Yanıkkaya Demirel***		**Independent Learning**

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COMMITTEE I - CARDIOVASCULAR SYSTEM
IV. WEEK / 04 – 08 Oct 2021 (Group 1 Face to Face, Group 2 Online)

	Monday 04-Oct-2021	Tuesday 05-Oct-2021	Wednesday 06-Oct-2021	Thursday 07-Oct-2021	Friday 08-Oct-2021
09.00- 09.50	PBL Session	**Lecture** Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System *Deniz Kıraç*	**Lecture** Blood Coagulation, Primary Hemostasis *İnci Özden*	**Lecture** Circulatory Shock and Physiology of Its Treatment *Mehtap Kaçar*	**Lecture** Local and Humoral Control of Blood Flow by the Tissues *Bayram Yılmaz*
10.00- 10.50		**Lecture** Oxygen, Oxidative Stress, NO, Redox Disequilibrium in the Failing Heart and Cardiovascular System *Deniz Kıraç*	**Lecture** Secondary Hemostasis, Procoagulation, Anticoagulation, Fibrinolysis *İnci Özden*	**Lecture** Cardiac Failure *Mehtap Kaçar*	**Lecture** Local and Humoral Control of Blood Flow by the Tissues *Bayram Yılmaz*
11.00- 11.50		**Lecture** Vascular Distensibility and Functions of Arterial and Venous Systems *Bayram Yılmaz*	**Lecture** Heart Valves and Heart Sounds *Bayram Yılmaz*	**Lecture** Development of Circulatory Systems; Arteries and Anomalies *Alev Cumbul*	**Laboratory / Histology &Embryology** Histology of Cardiovascular System *Alev Cumbul & Aylin Yaba Uçar* **Group A**
12.00- 12.50	**Independent Learning**	**Lecture** Vascular Distensibility and Functions of Arterial and Venous Systems *Bayram Yılmaz*	**Lecture** Heart Valves and Heart Sounds *Bayram Yılmaz*	**Lecture** Development of Circulatory Systems; Veins and Anomalies *Alev Cumbul*	**Group B**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Online Laboratory / Biochemistry** Peripheral Blood Smear *Jale Çoban & Müge Kopuz Alvarez Noval*	**Lecture** Introduction to Mycology *Nilgün Çerikçioğlu*	**Lecture** Superficial/Subcutaneous Mycosis *Nilgün Çerikçioğlu*	**ICP / CSL:** Basic Life Support and Heimlich Maneuver *Gökhan Gencer Cem Şimşek* **Group C**	**Group C**
15.00- 15.50		**Lecture** Systemic Mycoses *Nilgün Çerikçioğlu*	**Lecture** Diagnostic Methods in Mycology *Nilgün Çerikçioğlu*	*Gökhan Gencer Cem Şimşek* **Group C**	**SRPC SGS** **Group A** *Deniz Kıraç*	**Group D**
16.00- 16.50	**Online Laboratory/ Physiology** ECG I *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*	**Lecture** Introduction to Mycology *Nilgün Çerikçioğlu*	**Lecture** Opportunistic Mycoses-I *Nilgün Çerikçioğlu*			**Group E**
17.00-17.50	**Independent Learning**	**Lecture** Coronary Circulation *Mehtap Kaçar*	**Lecture** Opportunistic Mycoses-II *Nilgün Çerikçioğlu*			**Independent Learning**

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COMMITTEE I - CARDIOVASCULAR SYSTEM
V. WEEK / 11 – 15 Oct 2021 (Group 1 Online, Group 2 Face to Face)

	Monday 11-Oct-2021	Tuesday 12-Oct-2021		Wednesday 13-Oct-2021		Thursday 14-Oct-2021		Friday 15-Oct-2021	
09.00- 09.50	**Laboratory / Histology&Embryology** Histology of Lymphoreticular System ***Alev Cumbul & Aylin Yaba Uçar*** **Group E**	**Independent Learning**		**Laboratory / Physiology** ECG II-Blood Pressure - Heart Sounds ***Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*** **Group E1**	**Laboratory / Microbiology** Principles and Procedures of Laboratory Safety/ Mycology ***Pınar Çıragil*** **Group E2**	**Lecture** Disorders Concerning Hemoglobin Metabolism ***İnci Özden***		**Laboratory / Anatomy** Thoracic Wall, Cavity,Mediastinum/ Great Vessels Of The Body And Lymphatic System ***Aikaterini Panteli*** **Group 2**	
10.00- 10.50	**Group A**	**Independent Learning**		**Group A2**	**Group A1**	**Lecture** Disorders Concerning Hemoglobin Metabolism ***İnci Özden***		**Group 3**	
11.00- 11.50	**Group B**	**Independent Learning**		**Group B2**	**Group B1**	**Lecture** Local and Humoral Control of Blood Flow by the Tissues ***Bayram Yılmaz***		**Group 4**	
12.00- 12.50	**Group C**	**Independent Learning**		**Group C2**	**Group C!**	**Independent Learning**		**Group 1**	
13.00- 13.50	**Lunch Break**								
14.00-14.50	**Group D**	**Laboratory / Physiology** ECG II-Blood Pressure -Heart Sounds ***Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*** **Group A1**	**Laboratory / Microbiology** Principles and Procedures of Laboratory Safety/ Mycology ***Pınar Çıragil*** **Group A2**	**Group D2**	**Group D1**	**ICP / CSL:** Basic Life Support and Heimlich Maneuver ***Gökhan Gencer Cem Şimşek*** **Group D**		**ICP / CSL:** Basic Life Support and Heimlich Maneuver ***Gökhan Gencer Cem Şimşek*** **Group E**	
15.00- 15.50	**Independent Learning**	**Group B1**	**Group B2**	**Group E2**	**Group E1**	***Gökhan Gencer Cem Şimşek*** **Group D**	**SRPC SGS** ***Deniz Kıraç*** **Group E**	***Gökhan Gencer Cem Şimşek*** **Group E**	**SRPC SGS** ***Deniz Kıraç*** **Group D**
16.00- 16.50	**Independent Learning**	**Group C1**	**Group C2**	**Lecture** Ischemia and Infarction ***Aydın Sav***					
17.00-17.50	**Independent Learning**	**Group D1**	**Group D2**	**Lecture** Ischemia and Infarction ***Aydın Sav***					

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COMMITTEE I - CARDIOVASCULAR SYSTEM
VI. WEEK / 18 – 22 Oct 2021

<table>
<tr><th></th><th>Monday
18-Oct-2021</th><th>Tuesday
19-Oct-2021</th><th>Wednesday
20-Oct-2021</th><th>Thursday
21-Oct-2021</th><th>Friday
22-Oct-2021</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="3">Independent Learning</td><td rowspan="3">Assessment Session
(Physiology, Histology&Embryology, Microbiology, Biochemisrty Practical Exams)</td><td rowspan="3">Independent Learning</td><td rowspan="3">Independent Learning</td><td>Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td rowspan="2">Assessment Session
Committee I
(MCQ)</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td><td colspan="5"></td></tr>
<tr><td>13.00- 13.50</td><td colspan="5">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td rowspan="4">Independent Learning</td><td rowspan="4">Assessment Session
(Anatomy Practical Exam)</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td>Program Evaluation Session
Evaluation of the Committee I Program
Secretary of the Committee</td></tr>
<tr><td>15.00- 15.50</td><td rowspan="3">Independent Learning</td></tr>
<tr><td>16.00- 16.50</td></tr>
<tr><td>17.00-17.50</td><td></td></tr>
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IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators

COMMITTEE II - RESPIRATORY SYSTEM

DISTRIBUTION of LECTURE HOURS
October 25– December 3, 2021
COMMITTEE DURATION: 6 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	11	4GX2H	19
	BIOPHYSICS	4	0	4
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	6	1GX2H	8
	IMMUNOLOGY	7	0	7
	MEDICAL GENETIC	18	0	18
	MEDICAL MICROBIOLOGY	26	8GX1H	34
	PATHOLOGY	9	0	9
	PHYSIOLOGY	17	8GX1H	25
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	5GX3H	15
	PBL	6	0	6
	TOTAL	**108**	**41**	**149**
	INDEPENDENT LEARNING HOURS			87

OTHER COURSES

MED 202	**INTRODUCTION to CLINICAL PRACTICE- II**	6	5GrX3H	21

Coordination Committee	**Head**	Burcu GEMİCİ BAŞOL, PhD. Assoc. Prof.
	Secretary	Sıtkı TIPLAMAZ, MD. Assist. Prof.
	Member	Alev CUMBUL, MD. Assist. Prof.
	Member	Deniz KIRAÇ, PhD Assoc. Prof.

COMMITTEE II - RESPIRATORY SYSTEM
LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Assist. Prof. Mohammed ELGAZZAR, MD, Assist. Prof. LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL GENETICS	Ömer Faruk BAYRAK, PhD Prof.
MEDICAL MICROBIOLOGY	Güner SÖYLETİR, MD, Prof. Aynur EREN TOPKAYA, MD, Prof. Pınar ÇIRAGİL, MD, Prof. Nilgün ÇERİKÇİOĞLU, MD, Prof.
PATHOLOGY	Aydın SAV, MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD, Prof. Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.

OTHER COURSES

MED 202 INTRODUCTION to CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Emin Gökhan GENCER, MD, Assist. Prof. Hande Candemir, MD, Assist. Prof.

COMMITTEE II - RESPIRATORY SYSTEM
AIM and LEARNING OBJECTIVES

AIMS

1. To convey information about biophysical, biological, anatomical, embryological, histological, and physiological properties of respiratory system,
2. To convey information about functional activity of lungs by defining all basic parameters,
3. To convey information about respiratory system anatomy,
4. To convey basic, general knowledge about immunology,
5. To convey basic, general knowledge and information about the structural/biological features and pathogenesis of bacteria,
6. To convey information about good laboratory and clinical practices in research projects,
7. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

At the end of this committee, student should be able to:

KNOWLEDGE

1.0. For respiratory system;
   1.1. explain biophysical changes,
   1.2. associate with the clinical reflections.
2.0. For nose, paranasal sinus, pharynx, larynx, and lung;
   2.1. describe their anatomy,
   2.2. associate with adjacent tissues and organs,
   2.3. explain their functional and clinical reflections.
3.0. For respiratory system;
   3.1. explain developmental stages and list embryological origins of organs,
   3.2. associate the relation between major birth abnormalities and developmental process.
   3.3. explain histological properties of upper respiratory system
   3.4. explain histological properties of lower respiratory system
4.0 Explain functions of pulmonary system.
5.0 explain mechanisms of oxygen and carbon dioxide exchange and transportation.
6.0 describe dynamics of microcirculation together with general and pulmonary circulation.
7.0 describe nervous (autonomous) control of pulmonary system.
8.0 describe dynamics and control of pulmonary circulation.
9.0 describe measurement of spirometry method.
10.0 explain basics of exercise physiology and the effects of exercise on the cardiovascular and respiratory systems,
11.0 explain the adaptive changes in the respiratory system in extreme conditions and basic information about pathophysiology of respiratory system disorders.
12.0 For immune system;
   12.1. describe the properties of pulmonary immune response
   12.2. relate changes with infection diseases.
13.0 Explain inherited and non-inherited genetic mechanisms in neoplasia.
14.0 Describe the structural/biological features and pathogenesis of bacteria.
15.0 List methods used in protection from microorganisms.
16.0 For endogenous and exogenous harmful agents;
   16.1. describe their mechanisms of cell and tissue damage,
   16.2. describe adaptation process of cells.
17.0 list pathologies resulting from endogenous and exogenous harmful agents and consequently emerging diseases.
18.0 describe how to prepare a scientific research presentation.
19.0 prepare a research article presentation
20.0 explain the steps of a statistical hypothesis test according to the properties of a given data.
21.0 for statistical hypothesis,
   21.1 list the statistical hypothesis test according to the properties of given data
   21.2. choose the appropriate statistical hypothesis test according to the properties of given data.
22.0 explain case scenario related basic medical science topics in a clinical context.

COMMITTEE II - RESPIRATORY SYSTEM
DISTRIBUTION of LECTURE HOURS
October 25– December 3, 2021
COMMITTEE DURATION: 6 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	11	4GX2H	19
	BIOPHYSICS	4	0	4
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	6	1GX2H	8
	IMMUNOLOGY	7	0	7
	MEDICAL GENETIC	18	0	18
	MEDICAL MICROBIOLOGY	26	8GX1H	34
	PATHOLOGY	9	0	9
	PHYSIOLOGY	17	8GX1H	25
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	5GX3H	15
	PBL	6	0	6
	TOTAL	**108**	**41**	**149**
	INDEPENDENT LEARNING HOURS			87

OTHER COURSES

MED 202	**INTRODUCTION to CLINICAL PRACTICE- II**	6	5GrX3H	21

Coordination Committee	**Head**	Burcu GEMİCİ BAŞOL, PhD. Assoc. Prof.
	Secretary	Sıtkı TIPLAMAZ, MD. Assist. Prof.
	Member	Alev CUMBUL, MD. Assist. Prof.
	Member	Deniz KIRAÇ, PhD Assoc. Prof.

COMMITTEE II - RESPIRATORY SYSTEM
LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Aikaterini PANTELİ, MD, Assist. Prof. Mohammed ELGAZZAR, MD, Assist. Prof. LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL GENETICS	Ömer Faruk BAYRAK, PhD Prof.
MEDICAL MICROBIOLOGY	Güner SÖYLETİR, MD, Prof. Aynur EREN TOPKAYA, MD, Prof. Pınar ÇIRAGİL, MD, Prof. Nilgün ÇERİKÇİOĞLU, MD, Prof.
PATHOLOGY	Aydın SAV, MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD, Prof. Burcu GEMİCİ BAŞOL, PhD, Assoc. Prof
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.

OTHER COURSES

MED 202 INTRODUCTION to CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Emin Gökhan GENCER, MD, Assist. Prof. Hande Candemir, MD, Assist. Prof.

COMMITTEE II - RESPIRATORY SYSTEM
AIM and LEARNING OBJECTIVES

AIMS

1. To convey information about biophysical, biological, anatomical, embryological, histological, and physiological properties of respiratory system,
2. To convey information about functional activity of lungs by defining all basic parameters,
3. To convey information about respiratory system anatomy,
4. To convey basic, general knowledge about immunology,
5. To convey basic, general knowledge and information about the structural/biological features and pathogenesis of bacteria,
6. To convey information about good laboratory and clinical practices in research projects,
7. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

At the end of this committee, student should be able to:

KNOWLEDGE

8.0. For respiratory system;
- 8.1. explain biophysical changes,
- 8.2. associate with the clinical reflections.

9.0. For nose, paranasal sinus, pharynx, larynx, and lung;
- 9.1. describe their anatomy,
- 9.2. associate with adjacent tissues and organs,
- 9.3. explain their functional and clinical reflections.

10.0. For respiratory system;
- 3.1. explain developmental stages and list embryological origins of organs,
- 3.2. associate the relation between major birth abnormalities and developmental process.
- 3.3. explain histological properties of upper respiratory system
- 3.4. explain histological properties of lower respiratory system

11.0 Explain functions of pulmonary system.
12.0 explain mechanisms of oxygen and carbon dioxide exchange and transportation.
13.0 describe dynamics of microcirculation together with general and pulmonary circulation.
14.0 describe nervous (autonomous) control of pulmonary system.
14.0. describe dynamics and control of pulmonary circulation.
15.0 describe measurement of spirometry method.
16.0 explain basics of exercise physiology and the effects of exercise on the cardiovascular and respiratory systems,
17.0 explain the adaptive changes in the respiratory system in extreme conditions and basic information about pathophysiology of respiratory system disorders.
18.0 For immune system;
- 18.1. describe the properties of pulmonary immune response
- 18.2. relate changes with infection diseases.

19.0 Explain inherited and non-inherited genetic mechanisms in neoplasia.
14.0 Describe the structural/biological features and pathogenesis of bacteria.
15.0 List methods used in protection from microorganisms.
16.0 For endogenous and exogenous harmful agents;
- 16.1. describe their mechanisms of cell and tissue damage,
- 16.2. describe adaptation process of cells.

17.0 list pathologies resulting from endogenous and exogenous harmful agents and consequently emerging diseases.
18.0 describe how to prepare a scientific research presentation.
19.0 prepare a research article presentation
20.0 explain the steps of a statistical hypothesis test according to the properties of a given data.
21.0 for statistical hypothesis,
- 21.1 list the statistical hypothesis test according to the properties of given data
- 21.2. choose the appropriate statistical hypothesis test according to the properties of given data.

22.0 explain case scenario related basic medical science topics in a clinical context.

COMMITTEE II - RESPIRATORY SYSTEM
COMMITTEE II ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
2.0, 22.0	ANATOMY	Dr. A. Panteli	11	4	4	19
1.0, 22.0	BIOPHYSICS	Dr. A. Maharramov	4	1	1	6
20.0 - 21.0	BIOSTATISTICS	Dr. Ç. Keleş	4	1	1	6
3.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar	2	1	1	10
		Dr. A. Cumbul	4	1	1	
12.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	7	3	3	13
13.0	MEDICAL GENETIC	Dr. Ö.F. Bayrak	18	6	6	30
14.0-15.0	MEDICAL MICROBIOLOGY	Dr. G. Söyletir Dr. A. Eren Topkaya Dr. P. Çıragil Dr. N. Çerikçioğlu	24	9	9	42
16.0-17.0	PATHOLOGY	Dr. A. Sav	9	3	3	15
4.0-11.0, 22.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	16	6	6	28
22.0	PBL		1	0	0	1
		TOTAL	**100**	**35/200#**	**35/200#**	**170**

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS
		LPE
2.0	ANATOMY	**40**
3.0	HISTOLOGY & EMBRYOLOGY	**10**
14.0-15.0	MEDICAL MICROBIOLOGY	**20**
4.0-11.0	PHYSIOLOGY	**30**
	TOTAL	**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).
Total value of LPE is equal to 100 points
Committee Score (CS)= 95% of [90% CE (MCQ and SbMCQ) + 10%(LPE)] + 5% of PBL-P

Abbreviations:
MCQ: Multiple Choice Questions
SbMCQ: Scienario-based Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 35** out of 200 FE and ICE MCQs and SbMCQ will be from Committee II (Each question is 0.5 pt, equal value)

COMMITTEE II - RESPIRATORY SYSTEM
I. WEEK / 25 - 29 Oct 2021 (Group 2 Online, Group 1 Face to Face)

	Monday 25-Oct-2021	Tuesday 26-Oct-2021	Wednesday 27-Oct-2021	Thursday 28-Oct-2021	Friday 29-Oct-2021
09.00- 09.50	**PBL**	**Lecture** Cellular Injury and Necrosis *Aydın Sav*	**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Keleş*	**Lecture** Histology of the Upper Respiratory Tract *Alev Cumbul*	**National Holiday**
10.00- 10.50		**Lecture** Cellular Injury and Necrosis *Aydın Sav*	**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Keleş*	**Lecture** Histology of the Upper Respiratory Tract *Alev Cumbul*	
11.00- 11.50		**Lecture** Hemodynamics *Aydın Sav*	**Lecture** Infection and Immunity *Gülderen Yanıkkaya Demirel*	**Independent Learning**	
12.00- 12.50	**Introduction to Committee II** **Secretary of Committee**	**Lecture** Hemodynamics *Aydın Sav*	**Lecture** Infection and Immunity *Gülderen Yanıkkaya Demirel*	**Independent Learning**	
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Shock and Bleeding Control *E. Gökhan Gencer*	**Lecture** Introduction to Respiratory System *Aikaterini Panteli*	**Lecture** Infection and Immunity *Gülderen Yanıkkaya Demirel*	**National Holiday**	
15.00- 15.50	**Lecture** Injuries *E. Gökhan Gencer*	**Lecture** Nasal Anatomy and Paranasal Sinuses *Aikaterini Panteli*	**Lecture** The Larynx *Aikaterini Panteli*		
16.00- 16.50	**Lecture** Foreign Objects *E. Gökhan Gencer*	**Lecture** The Pharynx *Aikaterini Panteli*	**Lecture** The Larynx *Aikaterini Panteli*		
17.00-17.50	**Independent Learning**	**Lecture** The Pharynx *Aikaterini Panteli*	**Independent Learning**		

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE II - RESPIRATORY SYSTEM
II. WEEK / 1 - 5 Nov 2021 (Group 1 Online, Group 2 Face to Face)

	Monday 1-Nov-2021	Tuesday 2-Nov-2021	Wednesday 3-Nov-2021	Thursday 4-Nov-2021	Friday 5-Nov-2021
09.00- 09.50	**PBL**	**Independent Learning**	**Independent Learning**	**Lecture** Hemorrhage and Thrombosis *Aydın Sav*	**Independent Learning**
10.00- 10.50		**Independent Learning**	**Independent Learning**	**Lecture** Hemorrhage and Thrombosis *Aydın Sav*	**Lecture** Gram Positive Cocci *Güner Söyletir*
11.00- 11.50		**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Keleş*	**Independent Learning**	**Independent Learning**	**Lecture** Gram Positive Cocci *Güner Söyletir*
12.00- 12.50	**Independent Learning**	**Lecture** Test Hypotheses and Significance in Large Samples *E. Çiğdem Keleş*	**Independent Learning**	**Independent Learning**	**Lecture** Gram Positive Cocci *Güner Söyletir*
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Fractures and Dislocation *Hande Candemir*	**Lecture** Introduction to Bacteriology *Aynur Eren Topkaya*	**Independent Learning**	**ICP/CSL** Patient-Casualty Transportation / Bandaging Techniques *Özlem Tanrıöver* **Group D**	**Lecture** Pulmonary Circulation, Pulmonary Edema, Pleural Fluid *Bayram Yılmaz*
15.00- 15.50	**Lecture** Unconscious casualty *Hande Candemir*	**Lecture** Bacterial Genetics *Pinar Çıragil*	**Independent Learning**	*Özlem Tanrıöver* **Group D** / **SRPC SGS** *Deniz Kıraç* **Group C**	**Lecture** Pulmonary Circulation, Pulmonary Edema, Pleural Fluid *Bayram Yılmaz*
16.00- 16.50	**Lecture** Patient-Casualty Transportation Techniques *Hande Candemir*	**Lecture** Bacterial Pathogenesis *Güner Söyletir*	**Independent Learning**		**Independent Learning**
17.00-17.50	**Independent Learning**	**Lecture** Microbiome *Nilgün Çerikçioğlu*	**Independent Learning**		**Independent Learning**
18.00-19.59					
20.00-20.50		**Lecture** Introduction to Medical Genetics *Ömer Faruk Bayrak*	**Lecture** Patterns of Single Gene Inheritance *Ömer Faruk Bayrak*	**Lecture** The Human Genome and Chromosomal Basis of Heredity *Ömer Faruk Bayrak*	
21.00-21.50		**Lecture** Introduction to Medical Genetics *Ömer Faruk Bayrak*	**Lecture** Patterns of Single Gene Inheritance *Ömer Faruk Bayrak*	**Lecture** Cytogenetics and Chromosomal Disorders *Ömer Faruk Bayrak*	

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators. Full online lectures are in grey

COMMITTEE II - RESPIRATORY SYSTEM
III. WEEK / 8-12 Nov 2021 (Group 2 Online, Group 1 Face to Face)

	Monday 8-Nov-2021	Tuesday 9-Nov-2021	Wednesday 10-Nov-2021	Thursday 11-Nov-2021	Friday 12-Nov-2021
09.00- 09.50	**Independent Learning**	**Lecture** Cancer Genetics and Genomics *Ömer Faruk Bayrak*	**Commemoration of Atatürk**	**Lecture** Molecular Basis of Genetic Diseases *Ömer Faruk Bayrak*	**Laboratory / Anatomy** Upper / Lower Respiratory System *Aikaterini Panteli* **Group 1**
10.00- 10.50	**Independent Learning**	**Lecture** Cancer Genetics and Genomics *Ömer Faruk Bayrak*	**Lecture** Gram Negative Cocci *Güner Söyletir*	**Lecture** Tools of Human Molecular Genetics *Ömer Faruk Bayrak*	**Group 2**
11:00-11:50	**Lecture** Pulmonary Ventilation *Bayram Yılmaz*	**Lecture** Development of the Respiratory Systems & Anomalies *Aylin Yaba Uçar*	**Lecture** Gram Negative Cocci *Güner Söyletir*	**Lecture** Enterobacteriaceae *Güner Söyletir*	**Group 3**
12:00-12:50	**Lecture** Pulmonary Ventilation *Bayram Yılmaz*	**Lecture** Development of the Respiratory Systems & Anomalies *Aylin Yaba Uçar*	**Lecture** Injury by Endogenous Substances *Aydın Sav*	**Lecture** Enterobacteriaceae *Güner Söyletir*	**Group 4**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Pulmonary Innate Immune Response *Gülderen Yanıkkaya Demirel*	**Lecture** Gram Positive Aerob Bacilli *Güner Söyletir*	**Lecture** Diffusion of Blood Gases *Bayram Yılmaz*	**ICP/CSL** Patient-Casualty Transportation / Bandaging Techniques *Özlem Tanrıöver* **Group E**	**Independent Learning**
15.00- 15.50	**Lecture** Pulmonary Innate Immune Response *Gülderen Yanıkkaya Demirel*	**Lecture** Gram Positive Aerob Bacilli *Güner Söyletir*	**Lecture** Diffusion of Blood Gases *Bayram Yılmaz*	*Özlem Tanrıöver* **Group E** / **SRPC SGS** *Deniz Kıraç* **Group B**	**Independent Learning**
16.00- 16.50	**Lecture** Developmental Genetics and Birth Defects *Ömer Faruk Bayrak*	**Lecture** Histology of the Respiratory Systems; Respiratory Part *Alev Cumbul*	**Lecture** The Human Genome and Chromosomal Basis of Heredity *Ömer Faruk Bayrak*		**Independent Learning**
17.00-17.50	**Lecture** Developmental Genetics and Birth Defects *Ömer Faruk Bayrak*	**Lecture** Histology of The Respiratory Systems; Conducting Part *Alev Cumbul*	**Lecture** Cytogenetics and Chromosomal Disorders *Ömer Faruk Bayrak*		**Independent Learning**

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE II - RESPIRATORY SYSTEM
IV. WEEK /15 – 19 Nov 2021 (Group 1 Online, Group 2 Face to Face)

	Monday 15-Nov-2021	Tuesday 16-Nov-2021	Wednesday 17-Nov-2021	Thursday 18-Nov-2021	Friday 19-Nov-2021
09.00- 09.50	**Independent Learning**	**Lecture** Regulation of Respiration *Burcu Gemici Başol*	**Lecture** Pulmonary Adaptive Immune Response *Gülderen Yanıkkaya Demirel*	**Lecture** Aviation, High-Altitude and Space Physiology *Bayram Yılmaz*	**Laboratory / Anatomy** Larynx- Pleura and Diaphragm *Aikaterini Panteli* **Group 2**
10.00- 10.50	**Independent Learning**	**Lecture** Regulation of Respiration *Burcu Gemici Başol*	**Lecture** Pulmonary Adaptive Immune Response *Gülderen Yanıkkaya Demirel*	**Lecture** Physiology of Deep-Sea Diving and Hyperbaric Conditions *Bayram Yılmaz*	**Group 3**
11.00- 11.50	**Lecture** Transport of Blood Gases *Bayram Yılmaz*	**Lecture** Mycoplasma-Chlamydia-Rickettsia *Pınar Çıragil*	**Lecture** Injury by Toxic Substances and Pneumoconiosis *Aydın Sav*	**Lecture** Physiology of Deep-Sea Diving and Hyperbaric Conditions-2 *Bayram Yılmaz*	**Group 4**
12.00- 12.50	**Lecture** Transport of Blood Gases *Bayram Yılmaz*	**Lecture** Mycoplasma-Chlamydia-Rickettsia *Pınar Çıragil*	**Lecture** Injury by Toxic Substances and Pneumoconiosis *Aydın Sav*	**Lecture** Spirochetes *Pınar Çıragil*	**Group 1**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Anaerobs *Aynur Eren Topkaya*	**Lecture** Treatment of Genetic Disease - Introduction to Gene Therapy *Ömer Faruk Bayrak*	**Lecture** Pleura and Diaphragm *Aikaterini Panteli*	**ICP/CSL** Patient-Casualty Transportation / Bandaging Techniques *Özlem Tanrıöver* **Group B**	**Independent Learning**
15.00- 15.50	**Lecture** Anaerobs *Aynur Eren Topkaya*	**Lecture** Treatment of Genetic Disease - Introduction to Gene Therapy *Ömer Faruk Bayrak*	**Lecture** Pleura and Diaphragm *Aikaterini Panteli*	*Özlem Tanrıöver* **Group B**	**Lecture** Cultivation and identification of bacteria *Aynur Eren Topkaya*
16.00- 16.50	**Lecture** The Trachea *Aikaterini Panteli*	**Lecture** Principle of Surface Tension & Alveolar Mechanic *Akif Maharramov*	**Lecture** Review of the Respiratory System *Aikaterini Panteli*	**SRPC SGS** *Deniz Kıraç* **Group A**	**Lecture** Cultivation and identification of bacteria *Aynur Eren Topkaya*
17.00-17.50	**Lecture** The Lungs *Aikaterini Panteli*	**Lecture** Principle of Surface Tension & Alveolar Mechanic *Akif Maharramov*	**Independent Learning**		**Independent Learning**

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE II - RESPIRATORY SYSTEM
V. WEEK / 22 – 26 Nov 2021 (Group 2 Online, Group 1 Face to Face)

	Monday 22--Nov-2021	Tuesday 23-Nov-2021	Wednesday 24-Nov-2021	Thursday 25-Nov-2021	Friday 26-Nov-2021
09.00- 09.50	**Lecture** Introduction to Pathophysiology of Respiratory System *Mehtap Kaçar*	**Independent Learning**	**Lecture** Modeling in Circulatory & Respiratory Systems Akif Maharramov	**Laboratory / Microbiology** Bacteriology *Microbiology Instructors* **Group 1A**	**IICP/CSL** Patient-Casualty Transportation / Bandaging Techniques *Serdar özdemir* **Group C** / **SRPC SGS** *Deniz Kiraç* **Group E**
10.00- 10.50	**Lecture** Introduction to Pathophysiology of Respiratory System *Mehtap Kaçar*	**Laboratory /Histology& Embryology** Histology of Respiratory System *Alev Cumbul, Aylin Yaba Uçar* **Group A**	**Lecture** Modeling in Circulatory & Respiratory Systems Akif Maharramov	**Group 1B**	
11.00- 11.50	**Lecture** Genetics of Complex Diseases *Ömer Faruk Bayrak*	**Group B**	**Lecture** Sports Physiology *Mehtap Kaçar*	**Group 2A**	
12.00- 12.50	**Lecture** Genetics of Complex Diseases *Ömer Faruk Bayrak*	**Group C**	**Lecture** Sports Physiology *Mehtap Kaçar*	**Group 2B**	*Serdar özdemir* **Group C**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Non-fermenters *Güner Söyletir*	**Group D**	**Lecture** Gram Negative Curved Baciili *Güner Söyletir*	**IICP/CSL** Patient-Casualty Transportation / Bandaging Techniques *Serdar özdemir* **Group A**	**Laboratory / Microbiology** Bacteriology *Microbiology Instructors* **Group 3A**
15.00- 15.50	**Lecture** Gram Negative Small Non-enteric Bacilli I *Güner Söyletir*	**Group E**	**Lecture** Mycobacteria-Actimomycetes-Nocardia *Güner Söyletir*	*Serdar özdemir* **Group A** / **SRPC SGS** *Deniz Kiraç* **Group D**	**Group 3B**
16.00- 16.50	**Lecture** Gram Negative Small Non-enteric Bacilli II *Güner Söyletir*	**Laboratory / Physiology** Exercise and Metabolism-Spirometry *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*	**Lecture** Mycobacteria-Actimomycetes-Nocardia *Güner Söyletir*		**Group 4A**
17.00-17.50	**Independent Learning**		**Independent Learning**		**Group 4B**

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators

COMMITTEE II - RESPIRATORY SYSTEM
VI. WEEK / 29 Nov – 3 Dec 2021

<table>
<tr><th></th><th>Monday
29-Nov-2021</th><th>Tuesday
30-Nov-2021</th><th>Wednesday
1-Dec-2021</th><th>Thursday
2-Dec-2021</th><th>Friday
3-Dec-2021</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="3">Independent Learning</td><td rowspan="4">Assessment Session
(Anatomy, Physiology and Histology&Embryology, MicrobiologyPractical Exams)</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td>Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td rowspan="3">Assessment Session
Committee II
(MCQ)</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td></tr>
<tr><td>13.00- 13.50</td><td colspan="5">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td>Program Evaluation Session
Review of the Exam Questions, Evaluation of the Committee II Program
Secretary of the Committee</td></tr>
<tr><td>15.00- 15.50</td><td rowspan="3">Independent Learning</td></tr>
<tr><td>16.00- 16.50</td></tr>
<tr><td>17.00- 17.50</td></tr>
</table>

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

DISTRIBUTION of LECTURE HOURS
December 6, 2021– January 21, 2022
COMMITTEE DURATION: 7 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	20	5GX1H 5GX1H 5GX1H	35
	BIOCHEMISTRY	32	1GX2H	34
	BIOPHYSICS	10	0	10
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	12	5GX1H 5GX1H	22
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	6	0	6
	MEDICAL MICROBIOLOGY	10	1GX1H	11
	PATHOLOGY	6	0	6
	PHYSIOLOGY	17	1GX2H	19
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	5GX3H	15
	PBL	6	0	6
	TOTAL	**125**	**21**	**146**
	INDEPENDENT LEARNING HOURS	107		

OTHER COURSES

MED 202	**INTRODUCTION to CLINICAL PRACTICE- II**	5	4 GrX3H + 1 GrX3H	8

Coordination Committee	**Head**	İnci ÖZDEN, Ph.D. Prof.
	Secretary	Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof
	Member	Mehtap KAÇAR, MD. Ph.D. Prof.
	Member	Aikaterini PANTELİ, MD, Lecturer

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR, MD Assist. Prof. Aikaterini PANTELİ, MD Lecturer Mohammed ELGAZZAR, MD Lecturer LAB: Edibe BİLİŞLİ, DVM. LAB: Zeynep Büşra ODABAŞ, DDS LAB: Ahmet SAÇ, MD
BIOCHEMISTRY	İnci ÖZDEN, PhD Prof. LAB: Jale ÇOBAN, MD Prof. LAB: Müge KOPUZ ALVAREZ NOVAL, PhD Assist. Prof.
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	E. Çiğdem KELEŞ, PhD Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Altay Burak DALAN, PhD, Prof. Soner DOĞAN, PhD, Prof. Deniz KIRAÇ, PhD Assoc. Prof. Seda GÜLEÇ YILMAZ, PhD, Assoc. Prof
MEDICAL MICROBIOLOGY	Aynur EREN, MD Prof. Pınar ÇIRAGİL, MD Prof. Sibel Ergüven, MD. PhD Prof.
PATHOLOGY	Aydın SAV MD Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD. PhD Prof. Burcu GEMİCİ BAŞOL, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD. Prof. Deniz KIRAÇ, PhD. Assoc. Prof.

OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Güldal İZBIRAK, MD Assoc. Prof. Özlem TANRIÖVER, MD MPH. Prof. A. Arzu AKALIN, MD Assist. Prof. Serdar ÖZDEMİR, MD Assist. Prof. Fatma Tuğba COŞKUN, MD.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
AIM and LEARNING OBJECTIVES

AIMS

1. To convey information about biophysical, biological, anatomical, embryological, histological, physiological and biochemical properties of gastrointestinal system,
2. To convey knowledge on metabolic events in human organism and their clinical reflections.
3. To convey information about the structural/biological features and pathogenesis of parasites.
4. To convey basic, general knowledge about immunology,
5. To convey information about good laboratory and clinical practices in research projects.
6. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

At the end of this committee, student should be able to:

KNOWLEDGE

1.0 describe metabolic events in human organisms, using concepts of internal energy, work, temperature, entropy, free energy and enthalpy.
2.0 describe gastrointestinal system biology and basics of proper alimentation.
3.0 For oral cavity, temporomandibular joint, chewing muscles, pharynx, esophagus, stomach, small intestine, large intestine, liver, gall bladder and tracts, pancreas, spleen and peritoneum;
- 3.1. describe the anatomy,
- 3.2. associate with adjacent tissue and organs,
- 3.3. explain their functional and clinical reflections.

4.0 For abdominal wall, inguinal canal and portal system;
- 4.1. describe anatomy,
- 4.2. associate with adjacent tissue and organs,
- 4.3. explain their functional and clinical reflections.

5.0 For digestive system and related glands;
- 5.1. classify embryological origins and developmental stages Gastrointestinal Tract
- 5.2. classify embryological origins and developmental stages Gastrointestinal System Glands
- 5.3. associate the relation between birth abnormalities and developmental process
- 5.4. explain the histological properties of Upper Gastrointestinal tract
- 5.5. explain the histological properties of Lower Gastrointestinal tract
- 5.5. explain the histological properties of gland associated with Gastrointestinal system

6.0 For lipid, protein and carbohydrate metabolisms;
- 6.1. describe physiological mechanisms,
- 6.2. explain the relation to each other,
- 6.3. associate the changes of these relations at fasting and postprandial phase.

7.0 In digestive system;
- 7.1. list exocrine glands secreting acid-neutralizing fluids,
- 7.2. explain their secretion mechanisms,
- 7.3. explain hormonal and neural factors.

8.0 classify the roles of enzymes and hormones in digestion and absorption of lipids and proteins.
9.0 explain types and roles of lipoproteins.
10.0 explain metabolisms of fatty acids, cholesterol, ketone bodies.
11.0 explain amino acid metabolisms, synthesis of urea and control mechanism of the synthesis.
12.0 Describe the structural/biological features and pathogenesis of parasites.
13.0 describe the properties of mucosal immunity
14.0 describe how to prepare a scientific research presentation.
15.0 prepare a research article presentation
16.0 explain the steps of a statistical hypothesis test according to the properties of a given data count biostatistical sampling methods.
17.0 for statistical hypothesis,
- 17.1 list the statistical hypothesis test according to the properties of given data
- 17.2 choose the appropriate statistical hypothesis test according to the properties of given data

18.0 explain case scenario related basic medical science topics in a clinical context.

19.0 explain inflammatory processes, termination pathways, effects on tissues and mechanisms for inducing diseases.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRIBUTION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
3.0.-4.0.	ANATOMY	Dr. M.Elgazzar	17	7	7	31
6.0, 8.0.-11.0., 18.0	BIOCHEMISTRY	Dr. İ. Özden	27	11	11	49
1.0., 18.0	BIOPHYSICS	Dr. A. Maharramov	8	3	3	14
16.0-17.0	BIOSTATISTICS	Dr. E.Ç. Keleş	3	1	1	5
5.0.	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	4	4	18
13.0.	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. S. Doğan	5	2	2	9
12.0.	MEDICAL MICROBIOLOGY	Dr. A. Eren Dr. P. Çıragil	8	3	3	14
19.0	PATHOLOGY	Dr. A. Sav	5	2	2	9
7.0., 18.0.	PHYSIOLOGY	Dr. B. Yilmaz Dr. M. Kaçar Dr. B. Gemici Başol	14	6	6	26
18.0	PBL		**1**	**0**	**0**	1
	TOTAL		**100**	**40/200#**	**40/200#**	**180**

LEARNING OBJECTIVES	DISCIPLINE	DISTRUBITION of LAB ASSESSMENT POINTS
		LPE
3.0-4.0	ANATOMY	**60**
6.0, 8.0.-11.0.	BIOCHEMISTRY	**5**
5.0.	HISTOLOGY & EMBRYOLOGY	**20**
12.0.	MICROBIOLOGY	**5**
7.0.	PHYSIOLOGY	**10**
TOTAL		**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.).
Total value of LPE is equal to 100 points
Committee Score (CS) 95% of [90% CE (MCQ) + 10% (LPE)] + 5% of PBL-P
Abbreviations:
MCQ: Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points # In FE and ICE**, 41** out of 200 FE and ICE MCQs will be from Committee III (Each question is 0.5 pt, equal value

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM

I. WEEK / 06 – 10 Dec 2021 (Group 1 Online, Group 2 Face to Face)

	Monday 06-Dec-2021	Tuesday 07-Dec-2021	Wednesday 08-Dec-2021	Thursday 09-Dec-2021	Friday 10-Dec-2021
09.00- 09.50	**PBL**	**Lecture** Digestion and Absorption of Lipids ***İnci Özden***	**Lecture** Transport of Lipids in Plasma ***İnci Özden***	**Lecture** Oral Cavity ***Mohammed Elgazzar***	**Lecture** Cholesterol Metabolism ***İnci Özden***
10.00- 10.50		**Lecture** Digestion and Absorption of Lipids ***İnci Özden***	**Lecture** Transport of Lipids in Plasma ***İnci Özden***	**Lecture** Oral Cavity ***Mohammed Elgazzar***	**Lecture** Cholesterol Metabolism ***İnci Özden***
11.00- 11.50		**Lecture** Gastrointestinal Functions ***Burcu Gemici Başol***	**Lecture** Energy Transformation & Distribution in Bio-molecular Systems ***Akif Maharramov***	**Lecture** Bio-thermodynamics, Laws of Thermodynamics ***Akif Maharramov***	**Lecture** Propulsion and Mixing Movements in the GI Tract ***Burcu Gemici Başol***
12.00- 12.50	**Introduction to Committee III** ***Secretary of Committee***	**Lecture** Gastrointestinal Functions ***Burcu Gemici Başol***	**Independent Learning**	**Lecture** The Zeroth and First Laws of Thermodynamics ***Akif Maharramov***	**Lecture** Propulsion and Mixing Movements in the GI Tract ***Burcu Gemici Başol***
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Independent Learning**	**Lecture** Introduction to Medical Parasitology ***Sibel Ergüven***	**Lecture** GIT Development ***Mohammed Elgazzar***	**ICP/CSL** Nasogastric Tube Administration ***Özlem Tanrıöver/Arzu Akalın*** **Group C**	**Lecture** Histology of Upper Gastrointestinal Tract; Oral Cavity ***Alev Cumbul***
15.00- 15.50	**Independent Learning**	**Lecture** Urogenital and gastrointestinal Protozoa ***Sibel Ergüven***	**Lecture** GIT Development ***Mohammed Elgazzar***	***Özlem Tanrıöver/ArzuAkalın/ Gözde Şen*** **Group C** / **SRPC SGS** ***Deniz Kiraç*** **Group B**	**Lecture** Histology of Upper Gastrointestinal Tract; Tongue, Salivary Gland *Alev Cumbul*
16.00- 16.50	***Introduction to Elective Courses***	**Lecture** Burns, Freezing, Frostbite ***Gökhan Gencer***	**Independent Learning**		**Lecture** Histology of Alimentary Canal; Esophagus, Stomach ***Alev Cumbul***
17.00-17.50		**Lecture** Poisoning ***Gökhan gencer***	**Independent Learning**		**Independent Learning**

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
II. WEEK /13 – 17 Dec 2021 (Group 2 Online, Group 1 Face to Face)

	Monday 13-Dec-2021	Tuesday 14-Dec-2021	Wednesday 15-Dec-2021	Thursday 16-Dec-2021	Friday 17-Dec-2021
09.00- 09.50	**PBL Session**	**Lecture** Small Intestine ***Mohammed Elgazzar***	**Lecture** Lipolysis ***İnci Özden***	**Independent Learning**	**Lecture** Oxidation of Fatty Acids ***İnci Özden***
10.00- 10.50		**Lecture** Small Intestine ***Mohammed Elgazzar***	**Lecture** Lipolysis ***İnci Özden***	**Independent Learning**	**Lecture** Oxidation of Fatty Acids ***İnci Özden***
11.00- 11.50		**Lecture** Histology of Alimentary Canal; Small Intestine ***Aylin Yaba Uçar***	**Lecture** Digestion and Absorbtion in the Gastrointestinal Tract ***Burcu Gemici Başol***	**Lecture** Gland Associated with the Digestive System; Pancreas ***Aylin Yaba Uçar***	**Lecture** Propulsion and Mixing Movements in the GI Tract ***Burcu Gemici Başol***
12.00- 12.50	**Independent Learning**	**Lecture** Histology of Alimentary Canal; Large Intestine & Appendix ***Aylin Yaba Uçar***	**Lecture** Digestion and Absorbtion in the Gastrointestinal Tract ***Burcu Gemici Başol***	**Lecture** Gland Associated with the Digestive System; APUD System ***Aylin Yaba Uçar***	**Lecture** Propulsion and Mixing Movements in the GI Tract ***Burcu Gemici Başol***
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Esophagus & Stomach ***Mohammed Elgazzar***	**Lecture** Lipogenesis, Triacylglycerol Synthesis ***İnci Özden***	**Lecture** Gland Associated with the Digestive System; Liver ***Aylin Yaba Uçar***	**ICP/CSL** Nasogastric Tube Administration ***Özlem Tanrıöver/Arzu Akalın*** **Group D**	**Lecture** Digestion and Absorbtion in the Gastrointestinal Tract ***Burcu Gemici Başol***
15.00- 15.50	**Lecture** Esophagus & Stomach ***Mohammed Elgazzar***	**Lecture** Lipogenesis, Triacylglycerol Synthesis ***İnci Özden***	**Lecture** Gland Associated with the Digestive System; Gall Bladder ***Aylin Yaba Uçar***	***Özlem Tanrıöver*** *Arzu Akalın/Gözde Şen* **Group D** / **SRPC SGS** ***Deniz Kiraç*** **Group C**	**Lecture** Digestion and Absorbtion in the Gastrointestinal Tract ***Burcu Gemici Başol***
16.00- 16.50	**Lecture** Duodenum ***Mohammed Elgazzar***	**Lecture** Drowning *Gökhan Gencer*	**Independent Learning**		**Independent Learning**
17.00-17.50	**Independent Learning**	**Lecture** İnsect Bite *Gökhan Gencer*	**Independent Learning**		**Independent Learning**

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
III. WEEK / 20 – 24 Dec 2021 (Group 1 Online, Group 2 Face to Face)

	Monday 20-Dec-2021	Tuesday 21-Dec-2021	Wednesday 22-Dec-2021	Thursday 23-Dec-2021	Friday 24-Dec-2021
9.00- 09.50	**Lecture** Energetics and Metabolic Rate ***Bayram Yılmaz***	**Independent Learning**	**Lecture** Ketone Bodies ***İnci Özden***	**Lecture** Digestion and Absorption of Proteins ***İnci Özden***	**Lecture** Regulation of Feeding and Obesity ***Bayram Yılmaz***
10.00- 10.50	**Lecture** Energetics and Metabolic Rate ***Bayram Yılmaz***	**Lecture** Interrelationship of Biology of Major Organs ***Soner Doğan***	**Lecture** Ketone Bodies ***İnci Özden***	**Lecture** Digestion and Absorption of Proteins ***İnci Özden***	**Lecture** Regulation of Feeding and Obesity ***Bayram Yılmaz***
11:00-11:50	**Lecture** Development of Gastrointestinal Tract; Alimentary Canal ***Alev Cumbul***	**Lecture** Interrelationship of Biology of Major Organs ***Soner Doğan***	**Lecture** Secretory Functions of the Alimentary Tract ***Burcu Gemici Başol***	**Lecture** Entropy, Free Energy, Boltzmann Distribution ***Akif Maharramov***	**Lecture** Large Intestine ***Erdem Söztutar***
12:00-12:50	**Lecture** Development of Gastrointestinal Tract; Alimentary Canal ***Alev Cumbul***	**Lecture** Energy Transformation & Distribution in Bio-molecular Systems ***Akif Maharramov***	**Lecture** Secretory Functions of the Alimentary Tract ***Burcu Gemici Başol***	**Lecture** The Second Law of Thermodynamics ***Akif Maharramov***	**Lecture** Large Intestine ***Erdem Söztutar***
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Blood and tissue Protozoa *Sibel Ergüven*	**Lecture** Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy ***Akif Maharramov***	**Lecture** Cestodes *Sibel Ergüven*	**ICP/CSL** Nasogastric Tube Administration ***Özlem Tanrıöver/ Arzu Akalın*** **Group E**	**Lecture** Interrelationship of Biology of Major Organs ***Soner Doğan***
15.00- 15.50	**Lecture** Blood and tissue Protozoa *Sibel Ergüven*	**Lecture** Applications of the First Law to Isochoric, Isobaric Processes, Enthalpy ***Akif Maharramov***	**Lecture** Trematodes *Sibel Ergüven*	*Özlem Tanrıöver /Arzu Akalın/ Cem Şimşek* **Group E**	**SRPC SGS** ***Deniz Kiraç*** **Group A** **Lecture** Interrelationship of Biology of Major Organs ***Soner Doğan***
16.00- 16.50	**Independent Learning**	**Lecture** Legal Aspect of First Aid ***Elif Vatanoğlu Lutz***	**Independent Learning**		**Independent Learning**
17.00-17.50	**Independent Learning**	**Lecture** Legal Aspect of First Aid ***Elif Vatanoğlu Lutz***	**Independent Learning**		**Independent Learning**

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
IV. WEEK / 27 – 31 Dec 2021 (Group 2 Online, Group 1 Face to Face)

	Monday 27-Dec-2021	Tuesday 28-Dec-2021	Wednesday 29-Dec-2021	Thursday 30-Dec-2021	Friday 31-Dec-2021
09.00- 09.50	**Lecture** Metabolisms of Individual Amino Acids *İnci Özden*	**Lecture** Test Hypotheses and Significance-Chi-Square Test ***E. Çiğdem Keleş***	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels ***İnci Özden***	**Lecture** Citric Acid Cycle ***İnci Özden***	**Independent Learning**
10.00- 10.50	**Lecture** Metabolisms of Individual Amino Acids ***İnci Özden***	**Lecture** Test Hypotheses and Significance-Chi-Square Test ***E. Çiğdem Keleş***	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels ***İnci Özden***	**Lecture** Citric Acid Cycle ***İnci Özden***	**Independent Learning**
11.00- 11.50	**Lecture** Body Temperature and Its Regulation ***Bayram Yılmaz***	**Lecture** Liver as Organ ***Bayram Yılmaz***	**Lecture** Inflammation ***Aydın Sav***	**Lecture** Nutrigenomics ***Soner Doğan***	**Independent Learning**
12.00- 12.50	**Lecture** Body Temperature and Its Regulation ***Bayram Yılmaz***	**Lecture** Congenital Anaomalies of Gastrointestinal Trac ***Alev Cumbul***	**Lecture** Wound Healing ***Aydın Sav***	**Lecture** Nutrigenomics ***Soner Doğan***	**Independent Learning**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Physiology of Gastrointestinal Disorders ***Mehtap Kaçar***	**Lecture** Urea Cycle ***İnci Özden***	**Lecture** Repetition all of the Material ***Akif Maharramov***	**ICP/CSL** Nasogastric Tube Administration ***Özlem Tanrıöver/ Arzu Akalın*** **Group A**	**Independent Learning**
15.00- 15.50	**Lecture** Physiology of Gastrointestinal Disorders ***Mehtap Kaçar***	**Lecture** Urea Cycle ***İnci Özden***	**Lecture** Repetition all of the Material ***Akif Maharramov***	***Özlem Tanrıöver/ Arzu Akalın /Cem Şimşek*** **Group A** / **SRPC SGS** ***Deniz Kiraç*** **Group D**	**Independent Learning**
16.00- 16.50	**Lecture** Nematodes *Sibel Ergüven*	**Independent Learning**	**Independent Learning**		**Independent Learning**
17.00-17.50	**Lecture** Nematodes *Sibel Ergüven*	**Independent Learning**	**Independent Learning**		**Independent Learning**

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COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
V. WEEK / 03 – 07 Jan 2022 (Group 1 Online, Group 2 Face to Face)

	Monday 03-Jan-2022	Tuesday 04-Jan-2022	Wednesday 05-Jan-2022	Thursday 06-Jan-2022	Friday 07-Jan-2022
09.00- 09.50	**Lecture** Purine and Pyrimidine Metabolism ***İnci Özden***	**Lecture** Acute Inflammation ***Aydın Sav***	**Lecture** Chronic Inflammation ***Aydın Sav***	**Lecture** Xenobiotic Metabolism ***İnci Özden***	**Lecture** Overview of Metabolism ***İnci Özden (ONLINE)***
10.00- 10.50	**Lecture** Purine and Pyrimidine Metabolism ***İnci Özden***	**Lecture** Acute Inflammation ***Aydın Sav***	**Lecture** Chronic Inflammation ***Aydın Sav***	**Lecture** Xenobiotic Metabolism ***İnci Özden***	**Lecture** Overview of Metabolism ***İnci Özden (ONLINE)***
11:00-11:50	**Lecture** Opportunistic parasites *Sibel Ergüven*	**Lecture** Test Hypotheses and Significance- Z-Test ***Çiğdem Keleş***	**Lecture** Mucosal Immunity ***Gülderen Yanıkkaya Demirel***	**Lecture** Nerves and vasculature ***Erdem Söztutar***	**Laboratory / Physiology** **Digestive System** ***Bayram Yılmaz & Mehtap Kaçar &*** ***Burcu Gemici Başol***
12:00-12:50	**Lecture** Medical entomology *Sibel Ergüven*	**Lecture** Test Hypotheses and Significance- Z-Test ***Çiğdem Keleş***	**Lecture** Mucosal Immunity ***Gülderen Yanıkkaya Demirel***	**Lecture** Nerves and vasculature ***Erdem Söztutar***	
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Liver ***Erdem Söztutar***	**Lecture** The Pancreas and Spleen ***Erdem Söztutar***	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels ***İnci Özden***	**ICP/CSL** Nasogastric Tube Administration ***Özlem Tanrıöver/ Arzu Akalın*** **Group B**	**Laboratory / Biochemistry** **Lipid Determination in Blood** ***Jale Çoban &*** ***Müge Kopuz Alvarez Noval***
15.00- 15.50	**Lecture** Biliary System ***Erdem Söztutar***	**Lecture** Peritoneal and Abdominal Cavity ***Erdem Söztutar***	**Lecture** Metabolic Interrelationships and Provision of Tissue Fuels ***İnci Özden***	***Özlem Tanrıöver/ Arzu Akalın / Cem Şimşek*** **Group B** **SRPC SGS** ***Deniz Kiraç*** **Group E**	
16.00- 16.50	**Independent Learning**	**Lecture** Abdominal Wall Topographic Anatomy ***Erdem Söztutar***	**Independent Learning**		**Lecture** Review of the Digestive System ***Erdem Söztutar (Online)***
17.00-17.50	**Independent Learning**	**Independent Learning**	**Independent Learning**		**Lecture** Review of the Digestive System ***Erdem Söztutar (Online)***

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
VI. WEEK / 10 – 14 Jan 2022 (Face to Face)

	Monday 10-Jan-2022	Tuesday 11-Jan-2022	Wednesday 12-Jan-2022	Thursday 13-Jan-2022	Friday 14-Jan-2022
09.00- 09.50	Independent Learning	Independent Learning	Laboratory / Anatomy Upper GI system *Erdem Söztutar* *Edibe Bilişli* *Zeynep Odabaş* *Ahmet Saç* Group 1	Laboratory / Anatomy Lower GI system / abdominal cavity and peritoneum *Erdem Söztutar* *Edibe Bilişli* *Zeynep Odabaş* *Ahmet Saç* Group 1	Laboratory / Microbiology Parasitology *Sibel Ergüven* Group 3A
10.00- 10.50	Laboratory / Histology& Embryology Histology of GIS- I *Alev Cumbul & Aylin Yaba Uçar* Group A	Laboratory / Histology& Embryology Histology of GIS-II *Alev Cumbul &* *Aylin Yaba Uçar* Group B	Group 2	Group 2	Group 3B
11:00-11:50	Group B	Group C	Group 3	Group 3	Group 4A
12:00-12:50	Group C	Group D	Group 4	Group 4	Group 4B
13.00- 13.50	Lunch Break				
14.00- 14.50	Group D	Group E	Independent Learning	Laboratory / Anatomy Hepatobiliary system and spleen *Erdem Söztutar* *Edibe Bilişli* *Zeynep Odabaş* *Ahmet Saç* Group 4	Group 1A
15.00- 15.50	Group E	Group A	Independent Learning	Group 3	Group 1B
16.00- 16.50	Independent Learning	Independent Learning	Independent Learning	Group 2	Group 2A
17.00-17.50	Independent Learning	Independent Learning	Independent Learning	Group 1	Group 2B

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE III - GASTROINTESTINAL SYSTEM and METABOLISM
III. WEEK / 17 – 21 Jan 2022

	Monday 17-Jan-2022	Tuesday 18-Jan-2022	Wednesday 19-Jan-2022	Thursday 20-Jan-2022	Friday 21-Jan-2022
09.00- 09.50	Independent Learning	Assessment Session (Anatomy, Physiology, Biochemistry, Microbiology and Histology&Embryology Practical Exams)29 Mar	Independent Learning	Independent Learning	Independent Learning
10.00- 10.50					Assessment Session Committee III (MCQ)
11.00- 11.50					
12.00- 12.50					
13.00- 13.50	Lunch Break				Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee III Program *Secretary of the Committee*
14.00- 14.50	Independent Learning	Independent Learning	Independent Learning	Independent Learning	Independent Learning
15.00- 15.50					
16.00- 16.50					
17.00-17.50					

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

MIDTERM BREAK: JANUARY 24 – FEBRUARY 4, 2022

COMMITTEE IV - NERVOUS SYSTEM DISTRIBUTION of LECTURE HOURS

FEBRUARY 7-APRIL 1, 2022
COMMITTEE DURATION: 8 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	43	4GX6H	67
	BIOPHYSICS	3	0	3
	BIOSTATISTICS	4	0	4
	HISTOLOGY & EMBRYOLOGY	13	5GX1H	18
	IMMUNOLOGY	2	0	2
	MEDICAL BIOLOGY	4	0	4
	PHARMACOLOGY	9	2GX1H	11
	PHYSIOLOGY	34	10GX3H	64
	SCIENTIFIC RESEARCH and PROJECT COURSE-II	0	5GrX3H	15
	PBL	6	0	6
	TOTAL	**118**	**76**	**195**
	INDEPENDENT LEARNING HOURS	**123**		

OTHER COURSES

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5	5GrX3H	20
MED 614-631	ELECTIVE COURSES	14	0	14

Coordination Committee	**Head**	Bayram YILMAZ, PhD Prof.
	Secretary	Deniz KIRAÇ, PhD Assoc. Prof
	Member	Mehtap KAÇAR, MD PhD Prof.
	Member	Sıtkı TIPLAMAZ, MD Assist. Prof.

COMMITTEE IV- NERVOUS SYSTEM
LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR MD Assist. Prof. Aikaterini PANTELİ, MD Lecturer Mohammed ELGAZZAR, MD Lecturer LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOPHYSICS	Akif MAHARRAMOV, PhD Assist. Prof. Bilge GÜVENÇ TUNA, PhD Assoc. Prof.
BIOSTATISTICS	Çiğdem KELEŞ, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR PhD Assoc. Prof. Alev CUMBUL, PhD Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMİREL, MD PhD Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD Prof. Altay Burak DALAN, PhD Prof. Soner DOĞAN, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof Seda GÜLEÇ YILMAZ, PhD Assoc. Prof.
PHARMACOLOGY	Ece GENÇ, PhD, Prof. Emine Nur ÖZDAMAR, MD, Assist. Prof. Cenk Andaç, PhD, Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD Prof. Mehtap KAÇAR, MD PhD Prof. Burcu GEMİCİ, PhD Assoc. Prof.
SCIENTIFIC RESEARCH AND PROJECT COURSE-II	Bayram YILMAZ, PhD Prof. Deniz KIRAÇ, PhD Assoc. Prof.
PBL	

OTHER COURSES

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD MPH Prof. Arzu AKALIN, MD Assist. Prof. Fatma Tuğba COŞKUN, MD. Alp Kayıran, MD. Pınar Tura, MD.
ELECTIVE COURSES	

COMMITTEE IV - NERVOUS SYSTEM AIM and LEARNING OBJECTIVES

AIMS

1. To convey basic knowledge on biophysical, biological, anatomical, embryological, histological, physiological and biochemical properties of nervous system,
2. To convey knowledge on histology and development of central and peripheral nervous system and special senses,
3. To convey knowledge on biological basics of vision, hearing and taste,
4. To convey development mechanisms of inflammatory processes,
5. To convey general knowledge about neuroimmunology,
6. To convey basic knowledge about pharmacology,
7. To convey knowledge about the drugs effecting nervous system,
8. To convey information about good laboratory and clinical practices in research projects.
9. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

At the end of this committee, student should be able to:

1.0 describe biophysical basis of nervous system.

2.0 describe biology of nervous system.

3.0 In nervous system;
- 3.1. describe the anatomy of cerebrum, cerebellum, meninges, brain stem, cranial nerves and spinal cord,
- 3.2. describe limbic and autonomic nervous system,
- 3.3. describe the anatomy of structures forming eyes and ears,
- 3.4. describe the anatomy of skin and its derivatives and the mammary glands
- 3.5. describe descending and ascending pathways,
- 3.6. associate with adjacent tissue and organs,
- 3.7. explain functional and clinical reflections.

4.0 For central and peripheral nervous system and special senses

- 4.1. classify embryological origins and developmental stages Nervous System
- 4.2. classify embryological origins and developmental stages Eye and Ear
- 4.3. classify embryological origins and developmental stages Skin
- 4.4. explain of the histological properties Nervous System
- 4.5. explain of the histological properties Eye and Ear
- 4.6. describe histological properties of Skin

5.0 explain nervous conduction, ion channels and intracellular, extracellular ion concentration differences.

6.0 describe neuron, neuroglia, neurotransmitters and nerve fibers.

7.0 explain the synthesis and inactivation of neurotransmitters.

8.0 describe the energy mechanisms of brain.

9.0 In the nervous system;
- 9.1. explain parts and functions of brain cortex,
- 9.2. describe sensorial transmission pathways and special senses,
- 9.3. describe control of motor function (cortex, cerebellum, basal ganglions and brain stem),
- 9.4. describe functions of hypothalamus.

10.0 explain the relationship of learning-memory with hippocampus.

11.0 For brain waves and reflexes;
- 11.1. describe,
- 11.2. explain how they are measured in clinics.

12.0 explain biochemical basics of vision, hearing and taste senses.

13.0 In drug metabolism;
- 13.1. explain mechanisms and factors affecting absorption,
- 13.2. explain mechanisms and factors affecting distribution,
- 13.3. explain mechanisms and factors affecting excretion.
- 13.4. For drug pharmacokinetics;
- 13.5. explain clinical importance,

14.0 analyze examples.

15.0 describe the properties of neuroimmunology

16.0 describe how to prepare a scientific research presentation.

17.0 prepare a research article presentation

18.0 count biostatistical sampling methods.

19.0 explain the steps of a statistical hypothesis test according to the properties of a given data.

20.0 for statistical hypothesis,

20.1 list the statistical hypothesis test according to the properties of given data

20.2 choose the appropriate statistical hypothesis test according to the properties of given data.

21.0 explain case scenario related basic medical science topics in a clinical context.

COMMITTEE IV - NERVOUS SYSTEM COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQs and SbMCQ			
			CE	FE	IE	TOTAL
3.0., 21.0	ANATOMY	Dr. A. Panteli	39	17	17	73
1.0.	BIOPHYSICS	Dr. B. Güvenç Tuna	3	1	1	5
18.0-20.0	BIOSTATISTICS	Dr. E.Ç. Keleş	3	1	1	5
4.0., 21.0	HISTOLOGY & EMBRYOLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	4	4	18
15.0.	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	2	1	1	4
2.0.	MEDICAL BIOLOGY	Dr. T. İsbir Dr. A. B. Dalan	3	1	1	5
13.0-14.0.	PHARMACOLOGY	Dr. E. Genç Dr. Emine Nur Özdamar	8	3	3	14
5.0-12.0.,21.0	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	31	13	13	57
21.0	PBL		1	0	0	1
		TOTAL	**100**	**41/200#**	**41/200#**	**182**

LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS
		LPE
3.0.	ANATOMY	55
4.0.	HISTOLOGY & EMBRYOLOGY	10
13.0-14.0	PHARMACOLOGY	5
5.0-12.0.	PHYSIOLOGY	30
	TOTAL	**100**

Total value of LPE is equal to 100 points

Committee Score (CS) = 95% of [90% CE (MCQ and SbMCQ) + 10% (LPE)] + 5% of PBL-P

Abbreviations:

MCQ: Multiple Choice Questions
LPE: Laboratory Practical Exam
CE: Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 41** out of 200 FE and ICE MCQs will be from Committee IV (Each question is 0.5 Pts., equal val

COMMITTEE IV- NERVOUS SYSTEM
I. WEEK / 7-11 February 2022

	Monday 7-Feb-2022	Tuesday 8-Feb-2022	Wednesday 9-Feb-2022	Thursday 10-Feb-2022	Friday 11-Feb-2022	
09.00-09.50	**PBL**	**Lecture** Spinal Cord *Aikaterini Panteli*	**Lecture** Test Hypotheses and Significance-Z-Test *Çiğdem Keleş*	**Lecture** Drug Metabolism *Ece Genç*	**Independent Learning**	
10.00-10.50		**Lecture** Spinal Cord *Aikaterini Panteli*	**Lecture** Test Hypotheses and Significance-Z-Test *Çiğdem Keleş*	**Lecture** Sensory Receptors and pathways *Bayram Yılmaz*	**ICP MIDTERM EXAM**	
11.00-11.50		**Lecture** Synapse and Neurotransmitters *Bayram Yılmaz*	**Lecture** Cranial Nerves *Aikaterini Panteli*	**Lecture** Peripheral Nervous System *Bayram Yılmaz*		
12.00-12.50	Introduction to Committee IV Secretary of Committee	**Lecture** Synapse and Neurotransmitters *Bayram Yılmaz*	**Lecture** Cranial Nerves *Aikaterini Panteli*	**Independent Learning**	**Independent Learning**	
13.00-13.50	**Lunch Break**					
14.00-14.50	**Program Improvement Sessions**	**Lecture** Brainstem *Aikaterini Panteli*	**Lecture** Cranial Nerves *Aikaterini Panteli*	**Laboratory/ Anatomy** Spinal Cord/Brainstem/Cranial Nerves *Aikaterini Panteli* **Group 1**	**Elective Courses Week I**	**IL**
15.00-15.50	**Lecture** Introduction to Neuroanatomy *Aikaterini Panteli*	**Lecture** Brainstem *Aikaterini Panteli*	**Lecture** Cranial Nerves *Aikaterini Panteli*	**Group 2**		
16.00-16.50	**Lecture** Organization of Nervous System *Bayram Yılmaz*	**Lecture** Brainstem *Aikaterini Panteli*	**Lecture** Drug Distribution *Ece Genç*	**Group 3**	**IL**	**Elective Courses Week I**
17.00-17.50	**Lecture** Neuron and Neuroglia *Bayram Yılmaz*	**Lecture** Scope of Pharmacology and Passage of Drugs Across Membranes *Ece Genç*	**Lecture** Drug Distribution *Ece Genç*	**Group 4**		

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/ practice sessions will be announced by coordinators.

COMMITTEE IV- NERVOUS SYSTEM
II. WEEK / 14-18 February 2022

	Monday 14-Feb-2022	Tuesday 15-Feb-2022	Wednesday 16-Feb-2022	Thursday 17-Feb-2022	Friday 18-Feb-2022
09.00-09.50	**PBL**	**Lecture** Cerebellum *Aikaterini Panteli*	**Independent Learning**	**Laboratory / Anatomy** Cerebellum/ Diencephalon/Basal Ganglia *Aikaterini Panteli* **Group 1**	**Lecture** Electrical Activity of Cortex and Evoked Potentials. Neural Coding *Bilge Güvenç Tuna*
10.00-10.50		**Lecture** Cerebellum *Aikaterini Panteli*	**Laboratory / Pharmacology** Drug Metabolism *Ece Genç & Emine Özdamar & Cenk Andaç* **Group 1,2**	**Group 2**	**Lecture** Histology of CNS; PNS, Meninges and Spinal Cord *Aylin Yaba Uçar*
11.00-11.50		**Lecture** Cutaneous Senses *Bayram Yılmaz*	**Group 3,4**	**Group 3**	**Lecture** Development of Central Nervous System; Early Stages *Aylin Yaba Uçar*
12.00-12.50	**Independent Learning**	**Lecture** Cutaneous Senses *Bayram Yılmaz*	**Independent Learning**	**Group 4**	**Independent Learning**
13.00-13.50	**Lunch Break**				
14.00-14.50	**ICP LECTURE** Intramuscular/ Intradermal/ Subcutan Injection **Group D** *Özlem Tanrıöver/ Arzu Akalın*	**Lecture** Histology of CNS; PNS, Meninges and Spinal Cord *Aylin Yaba Uçar*	**Lecture** Physiology of Pain *Bayram Yılmaz*	**ICP LECTURE** Intramuscular/ Intradermal/ Subcutan Injection **Group E** *Özlem Tanrıöver/ Arzu Akalın*	**Elective Courses Week II** / **IL**
15.00-15.50	**Group D** *ÖzlemTanrıöver / Arzu Akalın/ Pınar Tura* / **SRPC SGS Group B** *Deniz Kiraç*	**Lecture** Diencephalon *Aikaterini Panteli*	**Lecture** Physiology of Pain *Bayram Yılmaz*	**Group E** *ÖzlemTanrıöver / Arzu Akalın/ Cem Şimşek* / **SRPC SGS Group C** *Deniz Kiraç*	
16.00-16.50		**Lecture** Diencephalon *Aikaterini Panteli*	**Lecture** Basal Ganglia *Aikaterini Panteli*		**IL** / **Elective Courses Week II**
17.00-17.50		**Lecture** Diencephalon *Aikaterini Panteli*	**Lecture** Basal Ganglia *Aikaterini Panteli*		

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITEE IV- NERVOUS SYSTEM
III. WEEK / 21-25 February 2022

	Monday 21-Feb-2022	Tuesday 22-Feb-2022	Wednesday 23-Feb-2022	Thursday 24-Feb-2022	Friday 25-Feb-2022
09.00-09.50	**Lecture** Electrical Activity of Cortex and Evoked Potentials. Neural Coding *Bilge Güvenç Tuna*	**Lecture** Limbic System *Aikaterini Panteli*	**Laboratory / Physiology** Reflexes- Electroencephalography *Bayram Yılmaz & Mehtap Kaçar & Burcu G.Başol* **Group 2A**	**Lecture** Neuroimmunology *Gülderen Yanıkkaya Demirel*	**Independent Learning**
10.00-10.50	**Lecture** Telencephalon *Aikaterini Panteli*	**Lecture** Limbic System *Aikaterini Panteli*	**Group 2B**	**Lecture** Cortical and Brainstem Control of Motor Function *Bayram Yılmaz*	**Lecture** Development of Central Nervous System; Late Stages *Aylin Yaba Uçar*
11.00-11.50	**Lecture** Telencephalon *Aikaterini Panteli*	**Lecture** Biology of Nervous System *Altay Burak Dalan*	**Group 1A**	**Lecture** Cortical and Brainstem Control of Motor Function *Bayram Yılmaz*	**Lecture** Congenital Anomalies of Nervous System *Aylin Yaba Uçar*
12.00-12.50	**Lecture** Telencephalon *Aikaterini Panteli*	**Lecture** Biology of Nervous System *Altay Burak Dalan*	**Group 1B**	**Independent Learning**	**Independent Learning**
13.00-13:50	**Lunch Break**				
14.00-14.50	**Lecture** Motor Functions of Spinal Cord *Bayram Yılmaz*	**Laboratory / Physiology** Reflexes- Electroencephalography *Bayram Yılmaz & Mehtap Kaçar & Burcu G.Başol* **Group 3A**	**ICP LECTURE** Intramuscular/ Intradermal/ Subcutan Injection **Group A** *Özlem Tanrıöver/ Arzu Akalın*	**ICP LECTURE** Intramuscular/ Intradermal/ Subcutan Injection **Group B** *Özlem Tanrıöver/ Arzu Akalın*	**Elective Courses Week III** / **IL**
15.00-15.50	**Lecture** Motor Functions of Spinal Cord *Bayram Yılmaz*	**Group 3B**			
16.00-16.50	**Lecture** Dopamine and Drugs Effecting Dopaminergic System *Emine Nur Özdamar*	**Group 4A**	**ICP** Intramuscular/ Intradermal/ Subcutan Injection **Group A** *ÖzlemTanrıöver / Arzu Akalın/ Gözde Şen* / **SRPC SGS Group D** *Deniz Kıraç*	**ICP** Intramuscular/ Intradermal/ Subcutan Injection **Group B** *ÖzlemTanrıöver / Arzu Akalın/ Pınar Tura* / **SRPC SGS Group A** *Deniz Kıraç*	**IL** / **Elective Courses Week III**
17.00-17.50	**Lecture** Serotonin and Drugs Effecting Serotonergic System of CNS *Emine Nur Özdamar*	**Group 4B**			

COMMITEE IV- NERVOUS SYSTEM
IV. WEEK / 22 February- 4 March 2022

	Monday 28-Feb-2022	Tuesday 1-Mar-2022	Wednesday 2-Mar-2022	Thursday 3-Mar-2022	Friday 4-Mar-2022
09.00-09.50	**Lecture** Ascending and Descending Pathways of the CNS *Aikaterini Panteli*	**Lecture** Vasculature of the CNS *Aikaterini Panteli*	**Independent Learning**	**Lecture** Eye and Orbit *Aikaterini Panteli*	**Lecture** Drug Excretion *Ece Genç*
10.00-10.50	**Lecture** Ascending and Descending Pathways of the CNS *Aikaterini Panteli*	**Lecture** Vasculature of the CNS *Aikaterini Panteli*	**Lecture** States of Brain Activity-Sleep and Brain Waves *Bayram Yılmaz*	**Lecture** Eye and Orbit *Aikaterini Panteli*	**Lecture** Drug Excretion *Ece Genç*
11.00-11.50	**Lecture** Functions of Cerebellum and Basal Ganglia in motor control *Bayram Yılmaz*	**Lecture** Correlation *Çiğdem Keleş*	**Lecture** States of Brain Activity-Sleep and Brain Waves *Bayram Yılmaz*	**Lecture** Visual Pathways *Aikaterini Panteli*	**Lecture** Development of Sensory Organs; Eye *Alev Cumbul*
12.00-12.50	**Lecture** Functions of Cerebellum and Basal Ganglia in Motor Control *Bayram Yılmaz*	**Lecture** Correlation *Çiğdem Keleş*	**Independent Learning**	**Independent Learning**	**Independent Learning**
13.00-13:50	**Lunch Break**				
14.00-14.50	**Lecture** Biology of Nervous System *Turgay İsbir*	**Laboratory / Anatomy** Telencephalon/ Limbic System /CNS Vessels/Dural Sinuses/Meninges/Ventricles *Aikaterini Panteli* **Group 3**	**ICP LECTURE** Intramuscular/ Intradermal/ Subcutan Injection **Group C** *Özlem Tanrıöver/ Arzu Akalın*	**ICP LECTURE** IV Cannulation **Group E** *Özlem Tanrıöver/ Arzu Akalın*	**Elective Courses Week IV** / **IL**
15.00-15.50	**Lecture** Biology of Nervous System *Turgay İsbir*	**Group 4**	**ICP** Intramuscular/ Intradermal/ Subcutan Injection **Group C** *Özlem Tanrıöver / Arzu Akalın/ Gözde Şen* / SRPC SGS **Group E** *Deniz Kıraç*	**ICP** IV Cannulation **Group E** *Özlem Tanrıöver / Arzu Akalın/ Tuba Coşkun* / SRPC SGS **Group B** *Deniz Kıraç*	
16.00-16.50	**Lecture** Meninges and Dural Venous Sinuses *Aikaterini Panteli*	**Group 1**			**IL** / **Elective Courses Week IV**
17.00-17.50	**Lecture** Meninges and Dural Venous Sinuses *Aikaterini Panteli*	**Group 2**			

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE IV – NERVOUS SYSTEM
V. WEEK / 7-11 March 2022

	Monday 7-Mar-2022	Tuesday 8-Mar-2022	Wednesday 9-Mar-2022	Thursday 10-Mar-2022	Friday 11-Mar-2022
09.00-09.50	**Lecture** Histology of Sensory Organs; Eye; Fibrous and Vascular Coat *Alev Cumbul*	**Lecture** Physiology of Vision *Mehtap Kaçar*	**Laboratory / Physiology** Visual Examination & Tests *Bayram Yılmaz & Mehtap Kaçar & Burcu G. Başol* **Group 3A**	**Lecture** Drug Application Routes and Pharmaceutical Forms of Drugs *Emine Nur Özdamar*	**Lecture** Physiology of Hearing *Burcu Gemici Başol*
10.00-10.50	**Lecture** Histology of Sensory Organs; Eye; Nervous Coat and Appendix *Alev Cumbul*	**Lecture** Physiology of Vision *Mehtap Kaçar*	**Group 3B**	**Lecture** Histology of Ear *Alev Cumbul*	**Lecture** Taste and Smell Pathways *Aikaterini Panteli*
11.00-11.50	**Lecture** Cerebral Cortex, Intellectual Functions of the Brain *Bayram Yılmaz*	**Lecture** Physiology of Hearing *Burcu Gemici Başol*	**Group 1A**	**Lecture** Histology of Ear *Alev Cumbul*	**Lecture** Taste and Smell Pathways *Aikaterini Panteli*
12.00-12.50	**Lecture** Learning and Memory *Bayram Yılmaz*	**Independent Learning**	**Group 1B**	**Independent Learning**	**Independent Learning**
13.00-13.50	**Lunch Break**				
14.00-14.50	**Lecture** Physiology of Vision *Mehtap Kaçar*	**Laboratory / Physiology** Visual Examination & Tests *Bayram Yılmaz & Mehtap Kaçar & Burcu G. Başol* **Group 4A**	**ICP LECTURE** IV Cannulation **Group A** *Özlem Tanrıöver/Arzu Akalın*	**ICP LECTURE** IV Cannulation **Group B** *Özlem Tanrıöver/ Arzu Akalın*	**Elective Courses Week V** / **IL**
15.00-15.50	**Lecture** Physiology of Vision *Mehtap Kaçar*	**Group 4B**	**ICP** IV Cannulation **Group A** *ÖzlemTanrıöver / Arzu Akalın/ Tuba Coşkun* / **SRPC SGS Group C** *Deniz Kıraç*	**ICP** IV Cannulation **Group B** *ÖzlemTanrıöver / Arzu Akalın/ Cem Şimşek* / **SRPC SGS Group D** *Deniz Kıraç*	
16.00-16.50	**Lecture** Neuroimmunology *Gülderen Yanıkkaya Demirel*	**Group 2A**			**IL** / **Elective Courses Week V**
17.00-17.50	**Independent Learning**	**Group 2B**			

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE IV- NERVOUS SYSTEM
VI.WEEK / 14-18 March 2022

	Monday 14-Mar-2022	Tuesday 15-Mar-2022	Wednesday 16-Mar-2022	Thursday 17-Mar-2022	Friday 18-Mar-2022
09.00-09.50	**Lecture** Auditory System Biophysics and Function *Bilge Güvenç Tuna*	**Lecture** Chemical Senses: Taste and Smell *Burcu Gemici Başol*	**Lecture** Parasympathetic Nervous System *Aikaterini Panteli*	**Lecture** Autonomic Nervous System *Bayram Yılmaz*	**Lecture** Cerebrospinal Fluid and Brain Metabolism *Bayram Yılmaz*
10.00-10.50	**Lecture** Ear *Aikaterini Panteli*	**Lecture** Chemical Senses: Taste and Smell *Burcu Gemici Başol*	**Lecture** Parasympathetic Nervous System *Aikaterini Panteli*	**Lecture** Autonomic Nervous System *Bayram Yılmaz*	**Lecture** Cerebrospinal Fluid and Brain Metabolism *Bayram Yılmaz*
11.00-11.50	**Lecture** Ear *Aikaterini Panteli*	**Lecture** Limbic System and the Hypothalamus *Bayram Yılmaz*	**Lecture** Skin, its derivatives and the Mammary Glands *Aikaterini Panteli*	**Lecture** Development of Sensory Organs; Ear *Alev Cumbul*	**Lecture** Histology of Skin and Appendage; Epidermis, Dermis, Appendage *Aylin Yaba Uçar*
12.00-12.50	**Lecture** Auditory Pathways *Aikaterini Panteli*	**Lecture** Limbic System and the Hypothalamus *Bayram Yılmaz*	**Independent Learning**	**Independent Learning**	**Lecture** Development of Skin and Appendage *Aylin Yaba Uçar*
13.00-13.50	**Lunch Break**				
14.00-14.50	**PHYSICIANS DAY**	**Lecture** Introduction to Autonomic Nervous System *Aikaterini Panteli*	**ICP LECTURE** IV Cannulation **Group C** *Özlem Tanrıöver/Arzu Akalın*	**ICP LECTURE** IV Cannulation **Group D** *Özlem Tanrıöver/Arzu Akalın*	**Elective Courses Week VI** / **IL**
15.00-15.50		**Lecture** Sympathetic Nervous System *Aikaterini Panteli*	**ICP** IV Cannulation **Group C** *ÖzlemTanrıöver / Arzu Akalın/ Alp Kayıran* / **SRPC SGS Group A** *Deniz Kıraç*	**ICP** IV Cannulation **Group D** *ÖzlemTanrıöver / Arzu Akalın/ Alp Kayıran* / **SRPC SGS Group E** *Deniz Kıraç*	
16.00-16.50		**Lecture** Sympathetic Nervous System *Aikaterini Panteli*			**IL** / **Elective Coures Week VI**
17.00-17.50		**Independent Learning**			

IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE IV- NERVOUS SYSTEM
VII.WEEK / 21-25 March 2022

	Monday 21-Mar-2022	Tuesday 22-Mar-2022	Wednesday 23-Mar-2022	Thursday 24-Mar-2022	Friday 25-Mar 2022	
09.00-09.50	**Independent Learning**	**Laboratory/ Physiology** Hearing test /Galvanized Skin Response **Group 3A** *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol*	**Independent Learning**	**Laboratory / Anatomy** Eye and Orbit *Aikaterini Panteli* **Group 1**	**Independent Learning**	
10.00-10.50	**Laboratory / Histology& Embryology** Histology of CNS and Skin *Alev Cumbul & Aylin Yaba Uçar* **Group B**	**Group 3B**	**Independent Learning**	**Group 2**	**Independent Learning**	
11.00-11.50	**Group A**	**Group 4A**	**Laboratory/ Physiology** Hearing test /Galvanized Skin Response *Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol* **Group 1A**	**Group 3**	**Independent Learning**	
12.00-12.50	**Group C**	**Group 4B**	**Group 1B**	**Group 4**	**Independent Learning**	
13.00-13.50	**Lunch Break**					
14.00-14.50	**Group E**	**Group 2A**	**Laboratory / Anatomy** Skin And Mammary Glands/Sympathetic Parasympathetic N.S *Aikaterini Panteli* **Group 1**	**Laboratory / Anatomy** Ear and Auditory Pathways *Aikaterini Panteli* **Group 1**	**Elective Courses Week VII (Midterm)**	**IL**
15.00-15.50	**Group D**	**Group 2B**	**Group 2**	**Group 2**		
16.00-16.50	**Independent Learning**	**Independent Learning**	**Group 3**	**Group 3**	**IL**	**Elective Courses Week VII**
17.00-17.50	**Independent Learning**	**Independent Learning**	**Group 4**	**Group 4**		

COMMITTEE IV- NERVOUS SYSTEM
VIII.WEEK / 28 March – 1 April 2022

<table>
<tr><th></th><th>Monday
28-Mar-2022</th><th>Tuesday
29-Mar-2022</th><th>Wednesday
30-Mar-2022</th><th>Thursday
31-Mar-2022</th><th colspan="2">Friday
1-Apr-2022</th></tr>
<tr><td>09.00-09.50</td><td rowspan="4">Independent Learning</td><td>Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td colspan="2">Independent Learning</td></tr>
<tr><td>10.00-10.50</td><td rowspan="3">Assessment Session
(Physiology, Pharmacology, Histology&Embryology and Anatomy Practical Exams)</td><td colspan="2" rowspan="3">Assessment Session
Committee IV Exam (MCQ)</td></tr>
<tr><td>11.00-11.50</td></tr>
<tr><td>12.00-12.50</td></tr>
<tr><td>13.00-13.50</td><td colspan="4">Lunch Break</td><td colspan="2">Program Evaluation Session Review of the Exam Questions, Evaluation of the Committee IV Program
Secretary of Committee IV</td></tr>
<tr><td>14.00-14.50</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="2">Elective Courses Week VIII</td><td rowspan="2">IL</td></tr>
<tr><td>15.00-15.50</td></tr>
<tr><td>16.00-16.50</td><td rowspan="2">IL</td><td rowspan="2">Elective Courses Week VIII</td></tr>
<tr><td>17.00-17.50</td></tr>
</table>

COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS
DISTRIBUTION of LECTURE HOURS

April 4th – June 3rd, 2022
COMMITTEE DURATION: 9 WEEKS

MED 203	BASIC MEDICAL SCIENCES II	THEORETICAL	PRACTICAL	TOTAL
	DISCIPLINE			
	ANATOMY	15	4Gr x 4H	31
	BIOCHEMISTRY	22	1Gr x 2H	24
	BIOPHYSICS	3	0	3
	BIOSTATISTICS	4	1Gr x 2H	6
	HISTOLOGY & EMBRYOLOGY	14	5Gr x 2H	24
	IMMUNOLOGY	1	0	1
	MEDICAL BIOLOGY	6	0	6
	MEDICAL MICROBIOLOGY	16	8Gr x 1H	24
	PATHOLOGY	7	1Gr x 1H	8
	PHARMACOLOGY	13	1Gr x 2H	15
	PHYSIOLOGY	32	8Gr x 1H 1G x 2H	42
	SCIENTIFIC RESEARCH and PROJ+ECT COURSE-II	0	5Gr x 3H	15
	PBL	6	0	6
	TOTAL	**139**	**66**	**205**
	INDEPENDENT LEARNING HOURS			83

OTHER COURSES

MED 202	INTRODUCTION to CLINICAL PRACTICE- II	5	5 Gr x 3	20
MED 614-631	ELECTIVE COURSES	14	0	14

Coordination Committee	**Head**	Bayram YILMAZ, PhD Prof.
	Secretary	Soner DOGAN, PhD, Prof.
	Member	Bilge Guvenc TUNA, PhD, Assoc. Prof.
	Member	Akif MAHARRAMOV, PhD, Assist. Prof.

COMMITTEE V- UROGENITAL and ENDOCRINE SYSTEMS
LECTURERS

MED 203 BASIC MEDICAL SCIENCES II	
DISCIPLINE	**LECTURERS**
ANATOMY	Erdem SÖZTUTAR, MD, Assist. Prof. Mohammed Elgazzar, MD. Lecturer. Aikaterini PANTELİ, MD, Assist. Prof. LAB: Edibe BİLİŞLİ, DVM LAB: Zeynep Büşra ODABAŞ, DMD
BIOCHEMISTRY	İnci ÖZDEN, PhD, Prof. LAB: Jale ÇOBAN, MD, Prof. LAB: Müge KOPUZ, PhD.
BIOPHYSICS	Akif MAHARRAMOV, PhD, Assist. Prof. Bilge GÜVENÇ TUNA, PhD, Assoc. Prof.
BIOSTATISTIC	E. Çiğdem KELEŞ, PhD, Assist. Prof.
HISTOLOGY & EMBRYOLOGY	Aylin YABA UÇAR, PhD, Assoc. Prof. Alev CUMBUL, PhD, Assist. Prof.
IMMUNOLOGY	Gülderen YANIKKAYA DEMiREL, MD, PhD, Assoc. Prof.
MEDICAL BIOLOGY	Turgay İSBİR, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.
MICROBIOLOGY	Güner Söyletir, MD, Prof.
PATHOLOGY	Aydın SAV MD, Prof.
PHARMACOLOGY	Ece GENÇ, PhD, Prof. Emine Nur ÖZDAMAR, MD, Assist. Prof. Cenk Andaç MD, Assist. Prof.
PHYSIOLOGY	Bayram YILMAZ, PhD, Prof. Mehtap KAÇAR, MD, PhD, Prof. Burcu GEMİCİ, PhD, Assoc. Prof.
PBL	
SCIENTIFIC PROJECTS-II	Bayram YILMAZ, PhD, Prof. Deniz KIRAÇ, PhD, Assoc. Prof.
ELECTIVE COURSES	

MED 202 INTRODUCTION TO CLINICAL PRACTICE II	
DISCIPLINE	**LECTURERS**
CLINICAL SKILLS LAB	Özlem TANRIÖVER, MD, Prof. A. Arzu AKALIN, MD, Assist. Prof. Alp KAYIRAN, MD. Assist. Prof. Pınar TURA, MD. Assist. Prof. F. Tuğba COŞKUN, MD Assist. Prof.

COMMITTEE V-UROGENITAL AND ENDOCRINE SYSTEMS

AIM AND LEARNING OBJECTIVES

AIMS

1. To convey knowledge about biological, anatomical, embryological, histological, physiological, immunological and biochemical properties of urogenital and endocrine systems.
2. To convey general knowledge about interrelationship of hormones and immunology,
3. To convey knowledge about structural/biological features and pathogenesis of viruses.
4. To convey development mechanisms of neoplasia and its effects and consequences on organism.
5. To convey information about good laboratory and clinical practices in research projects.
6. To convey basic knowledge about biostatistics.

LEARNING OBJECTIVES

At the end of this committee, student should be able to:

1.0. Describe biology of gonadal development and genetic differentiation.

2.1. In urogenital system, for male and female genital system organs, kidney, ureter, bladder, urethra, pelvis and perineum;

2.2. Describe its anatomy,

2.3. Associate with adjacent tissue and organs,

2.4. Explain their functional and clinical reflections.

3.1. In endocrine system, for thyroid, parathyroid, suprarenal gland and thymus,

3.2. Describe its anatomy,

3.3. Associate with adjacent tissue and organs,

3.4. Explain their functional and clinical reflections.

4.0. For endocrine system;

4.1 classify embryological origins and explain developmental stages of Organs,

4.2 Associate the relation between birth anomalies and developmental processes.

4.3 Describe histological properties of endocrine system

5.1. For urogenital systems;

5.2. Classify embryological origins and explain developmental stages of urogenital system organs,

5.3. Associate the relation between birth anomalies and developmental processes.,

5.4. Describe histological properties of Urinary system,

5.5. Describe histological properties of Genital system.

6.1. In endocrine system;

6.2. Describe endocrine, paracrine and neuroendocrine secretion,

6.3. Explain the regulatory role of hypothalamus and pituitary gland,

6.4. List secretions and functions of endocrine glands and organs.

7.1. In urinary system;

7.2. Explain renal function and structure of nephrons,

7.3. Explain renal blood flow and mechanisms of urine production,

7.4. Explain liquid-electrolyte and acid-base equilibrium.

8.1. In genital system;

8.2. Explain reproductive hormones and their functions in men and women,

8.3. Describe changes in the maternal body in pregnancy and lactation.

9.1. For hormones;

9.2. Classify according to mechanisms of action,

9.3. Explain their effects and relation to each other.

10.0 Explain biochemical functions of vitamins and minerals.

11.0 Describe factors causing neoplasia, formation, mechanisms of occurrence, and neoplastic diseases in organism, classification and staging of neoplasia.

12.0 Distinguish mechanisms of actions of drugs and explain toxicity of drugs.

13.0 Analyze events developing in response to drug receptor interactions.

14.0 Describe general principles of antimicrobial chemotherapy.

15.0 Describe general principles of cancer chemotherapy.

16.0 Describe pharmacology of inflammation and immunomodulation.

17.0 Describe the structural/biological features and pathogenesis of viruses

18.0 Describe the interrelationship of hormones and immunology

19.0 Describe the general principles of magnetic resonance imaging

20.0 For correlations between two continuous variables

20.1. Explain linear correlations using scatter plot and correlation coefficients

20.2. Classify the interpretations of the correlation coefficient

21.0 Explain linear regression equation and its features

22.0 Explain case scenario related basic medical science topics in a clinical context.

23.0 Define the prenatal diagnosis and teratology

COMMITTEE V - UROGENITAL and ENDOCRINE SYSTEMS

COMMITTEE ASSESSMENT MATRIX

LEARNING OBJECTIVES	DISCIPLINE	LECTURER/ INSTRUCTOR	DISTRUBITION of MCQsand SbMCQ			
			CE	FE	IE	TOTAL
2.0-3.0,22.0	ANATOMY	Dr. M. Elgazzar	11	6	6	23
9.0-10.0	BIOCHEMISTRY	Dr. İ. Özden	18	8	8	34
19.0	BIOPHYSICS	Dr. B.G. Tuna	2	1	1	4
20.0-21.0	BIOSTATISTICS	Dr. E.Ç. KELEŞ	3	1	1	5
4.0.-5.0-23	HISTOLOGY& EMBRYLOGY	Dr. A. Yaba Uçar Dr. A. Cumbul	10	5	5	20
18.0	IMMUNOLOGY	Dr. G. Yanıkkaya Demirel	1	1	1	3
1.0	MEDICAL BIOLOGY	Dr.T.İsbir Dr.D. Kıraç	4	2	2	8
17.0	MEDICAL MICROBIOLOGY	Dr. Güner Söyletir	13	6	6	25
11.0	PATHOLOGY	Dr. A. Sav	5	2	2	9
12.0-16.0	PHARMACOLOGY	Dr. E. Genç Dr. E. N. Özdamar Dr. C. Andaç	9	4	4	17
6.0-8.0., 22.0.	PHYSIOLOGY	Dr. B. Yılmaz Dr. M. Kaçar Dr. B. Gemici Başol	23	10	10	43
22.0	PBL		1	0	0	1
		TOTAL	**100**	**46/200#**	**46/200#**	**192**

LEARNING OBJECTIVES	DISCIPLINE	POINTS of ASSESSMENT METHODS
		LPE
2.0-3.0	ANATOMY	30
8.0-9.0	BIOCHEMISTRY	5
	BIOSTATISTICS	5
4.0.	HISTOLOGY & EMBRYLOGY	10
16.0.	MEDICAL MICROBIOLOGY	10
10.0.	PATHOLOGY	5
11.0-15.0.	PHARMACOLOGY	5
5.0-7.0	PHYSIOLOGY	30
	TOTAL	**100**

Total number of MCQs are 100, equal to100 pts. Each question has 1 pt.). Total value of LPE is equal to 100 points

Committee Score (CS) 95% of [90% CE (MCQ) + 10% (LPE)] + 5% of PBL-P

Abbreviations:

MCQ: Multiple Choice Questions
LPE: Laboratory Practical Exam **CE:** Committee Exam
CS: Committee Score
FE: Final Exam
ICE: Incomplete Exam
Pts.: Points
In FE and ICE**, 46** out of 200 FE and ICE MCQs will be from Committee I (Each question is equal value)

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
I. WEEK / 4 – 8 April 2022

	Monday 4-Apr-2022	Tuesday 5-Apr-2022	Wednesday 6-Apr-2022	Thursday 7-Apr-2022	Friday 8-Apr-2022	
09.00- 09.50	**PBL**	**Lecture** The Kidneys *Mohammed Elgazzar*	**Lecture** Mechanism of Drug Action 1 *Ece Genç*	**Lecture** DNA Viruses I *Güner Söyletir*	Introduction to Neoplasia and Biologic Behaviors of Neoplasm *Aydın Sav*	
10.00- 10.50		**Lecture** Urinary Tracts and Suprarenal Glands *Mohammed Elgazzar*	**Lecture** Mechanism of Drug Action 2 *Ece Genç*	**Lecture** DNA Viruses II *Güner Söyletir*	Introduction to Neoplasia and Biologic Behaviors of Neoplasm *Aydın Sav*	
11.00- 11.50		**Lecture** Body Fluids and Functions of Kidneys *Bayram Yılmaz*	**Lecture** Histology of Urinary System: General Aspect, Kidney Nephron *Aylin Yaba Uçar*	**Lecture** Urine Formation: Tubular Processing *Bayram Yılmaz*	**Lecture** Histology of Endocrine System: Hypophysis *Aylin Yaba Uçar*	
12.00- 12.50	Introduction to Committee V Secretary of Committee	**Lecture** Micturition *Bayram Yılmaz*	**Lecture** Histology of Urinary System: Excreatory Passage *Aylin Yaba Uçar*	**Lecture** Urine Formation: Tubular Processing *Bayram Yılmaz*	**Lecture** Histology of Endocrine System: Thyroid and Parathyroid and Suprarenal Glands *Aylin Yaba Uçar*	
13.00- 13.50	**Lunch Break**					
14.00- 14.50	**Lecture** Introduction to Urinary System *Mohammed Elgazzar*	**Lecture** Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors *İnci Özden*	**Lecture** Urine Formation and Renal Blood Flow *Bayram Yılmaz*	**Lecture** Histology of Endocrine System: General Aspect, Hypothalamus,Epiphysis *Aylin Yaba Uçar*	**Elective Courses Week IX**	**IL**
15.00- 15.50	**Lecture** The Kidneys *Mohammed Elgazzar*	**Lecture** Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors *İnci Özden*	**Lecture** Urine Formation and Renal Blood Flow *Bayram Yılmaz*	**Lecture** Male Genital Organs *Mohammed Elgazzar*		
16.00- 16.50	**Lecture** Introduction to Viruses *Güner Söyletir*	**Lecture** Biology of Sexual Differentiation And Development *Turgay İsbir*	**Lecture** Introduction to Genital Systems *Mohammed Elgazzar*	**Lecture** Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors *İnci Özden*	**IL**	**Elective Coures Week IX**
17.00-17.50	**Lecture** Viral Pathogenesis/ Oncogenesis *Güner Söyletir*	**Lecture** Biology of Sexual Differentiation And Development *Turgay İsbir*	**Lecture** Male Genital Organs *Mohammed Elgazzar*	**Lecture** Mechanisms of Hormone Actions, Intracellular and Cell Surface Receptors *İnci Özden*		

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
II.WEEK / 11 – 15 April 2022

	Monday 11-Apr-2022	Tuesday 12-Apr-2022	Wednesday 13-Apr-2022	Thursday 14-Apr-2022	Friday 15-Apr-2022	
09.00- 09.50	PBL	**Lecture** Hormones of Hypothalamus and Pituitary *İnci Özden*	**Lecture** Development of Genital System; General Aspects *Alev Cumbul*	**Lecture** Biology of Endocrine System *Deniz Kıraç*	**Lecture** Adrenocortical Hormones *Mehtap Kaçar*	
10.00- 10.50		**Lecture** Hormones of Hypothalamus and Pituitary *İnci Özden*	**Lecture** Histology of Male Genital System: Testis *Alev Cumbul*	**Lecture** Biology of Endocrine System *Deniz Kıraç*	**Lecture** Adrenocortical Hormones *Mehtap Kaçar*	
11.00- 11.50		**Lecture** Fluid and Electrolyte Balance *Bayram Yılmaz*	**Lecture** Regulation of Acid-Base Balance *Bayram Yılmaz*	**Lecture** Hormones of Adrenal Cortex and Adrenal Medulla *İnci Özden*	**Lecture** Nerves of the Pelvis *Mohammed Elgazzar*	
12.00- 12.50	**Independent Learning**	**Lecture** Fluid and Electrolyte Balance *Bayram Yılmaz*	**Lecture** Regulation of Acid-Base Balance *Bayram Yılmaz*	**Lecture** Hormones of Adrenal Cortex and Adrenal Medulla *İnci Özden*	**Lecture** Vasculature of the Pelvis *Mohammed Elgazzar*	
13.00- 13.50	**LUNCH BREAK**					
14.00- 14.50	**Lecture** Hormones of Hypothalamus and Pituitary *İnci Özden*	**Lecture** DNA Viruses III *Güner Söyletir*	**Lecture** Introduction to Endocrinology *Mehtap Kaçar*	**Lecture** RNA Viruses I *Güner Söyletir*	**Elective Courses Week X**	**IL**
15.00- 15.50	**Lecture** Thyroid Hormones *İnci Özden*	**Lecture** DNA Viruses IV *Güner Söyletir*	**Lecture** Pituitary Gland and Hypothalamic Control *Mehtap Kaçar*	**Lecture** RNA Viruses II *Güner Söyletir*		
16.00- 16.50	**Lecture** Biology of Sexual Differentiation And Development *Turgay İsbir*	**Lecture** DNA Viruses V *Güner Söyletir*	**Lecture** Female Genital Organs *MohammeElgazzar*	**Lecture** Posterior Pituitary Hormones *Mehtap Kaçar*	**IL**	**Elective Coures Week X**
17.00-17.50	**Lecture** Biology of Sexual Differentiation And Development *Turgay İsbir*	**Lecture** Post-receptor Events and Second Messengers *Cenk Andaç*	**Lecture** Female Genital Organs *Mohammed Elgazzar*	**Lecture** Thyroid Metabolic Hormones *Mehtap Kaçar*		

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
III. WEEK / 18 – 22 April 2022

	Monday 18-Apr-2022	Tuesday 19-Apr-2022	Wednesday 20-Apr-2022	Thursday 21-Apr-2022	Friday 22-Apr-2022	
09.00- 09.50	**Lecture** Introduction to Rational Pharmacotherapy *Emine Nur Özdamar*	**Lecture** Histology of Male Genital System: Excreatory Parts *Alev Cumbul*	**Lecture** Insulin, Diabetes Mellitus *Mehtap Kaçar*	**Lecture** Physiology of Growth Hormones *Bayram Yılmaz / Mehtap Kaçar*	**Lecture** Analysis of Variance and Multiple Comparisons *E. Çiğdem Keleş*	
10.00- 10.50	**Lecture** Eicosanoids *Emine Nur Özdamar*	**Lecture** Histology of the Female Genital System: Ovaries *Alev Cumbul*	**Lecture** Insulin, Diabetes Mellitus *Mehtap Kaçar*	**Lecture** Pineal Gland & Melatonin *Bayram Yılmaz*	**Lecture** Analysis of Variance and Multiple Comparisons *E. Çiğdem Keleş*	
11.00- 11.50	**Lecture** PTH, Calcitonin, Calcitriol *İnci Özden*	**Lecture** Diagnostic Methods in Virology *Güner Söyletir*	**Lecture** Linear Regression *E. Çiğdem Keleş*	**Lecture** Viral Oncogenesis ***Güner Söyletir***	**Lecture** Male Reproductive Physiology *Mehtap Kaçar*	
12.00- 12.50	**Lecture** PTH, Calcitonin, Calcitriol *İnci Özden*	**Lecture** Specific Viruses *Güner Söyletir*	**Lecture** Linear Regression *E. Çiğdem Keleş*	**Lecture** Prions *Güner Söyletir*	**Lecture** Male Reproductive Physiology *Mehtap Kaçar*	
13.00- 13.50	**LUNCH BREAK**					
14.00- 14.50	**Lecture** Vaccines *Güner Söyletir*	**Lecture** RNA Viruses IV *Güner Söyletir*	**ICP LECTURE** Intraarterial Blood Sampling *Mehmet Akif Öztürk/Tijen Alkan Bozkaya/ Seha Akduman* **Group D**	**ICP LECTURE** Intraarterial Blood Sampling *Mehmet Akif Öztürk/ Özlem Durmuş Arın/ Banu Salepçi* **Group E**	**Elective Courses Week XI**	**IL**
15.00- 15.50	**Lecture** RNA Viruses III *Güner Söyletir*	**Lecture** Oncogenesis, Incidence and Distribution o Cancer *Aydın Sav*	*Mehmet Akif Öztürk, Tijen Alkan Bozkaya, Seha Akduman* **Group D**	**SRPC SGS Group B** *Deniz Kiraç*	*Mehmet Akif Öztürk, Özlem Durmuş Arın, Banu Salepçi* **Group E**	**SRPC SGS Group C** *Deniz Kiraç*
16.00- 16.50	**Lecture** Regulation of Calcium & Phosphate Metabolism and Bone Formation *Bayram Yılmaz*	**Lecture** Oncogenesis, Incidence and Distribution o Cancer *Aydın Sav*			**IL**	**Elective Coures Week XI**
17.00-17.50	**Lecture** Regulation of Calcium & Phosphate Metabolism and Bone Formation *Bayram Yılmaz*	**Independent Learning**				

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
IV.WEEK / 25 – 29 April 2022

	Monday 25-Apr-2022	**Tuesday 26-Apr-2022**	**Wednesday 27-Apr-2022**	**Thursday 28-Apr-2022**	**Friday 29-Apr-2022**
09.00- 09.50	**Lecture** Introduction to Drug Development *Cenk Andaç*	**Lecture** Female Reproductive Physiology *Mehtap Kaçar*	**Lecture** Vitamins *İnci Özden*	**Lecture** Regulation of Calcium & Phosphate Metabolism and Bone Formation *Bayram Yılmaz*	**Lecture** Insulin, Glucagon *İnci Özden*
10.00- 10.50	**Lecture** Development of Biopharmaceuticals *Cenk Andaç*	**Lecture** Female Reproductive Physiology *Mehtap Kaçar*	**Lecture** Vitamins *İnci Özden*	**Lecture** Regulation of Calcium & Phosphate Metabolism and Bone Formation *Bayram Yılmaz*	**Lecture** Insulin, Glucagon *İnci Özden*
11.00- 11.50	**Lecture** Insulin, Glucagon *İnci Özden*	**Lecture** Minerals *İnci Özden*	**Lecture** Pregnancy and Lactation *Mehtap Kaçar*	**Lecture** Endocrine Organs *Mohammed Elgazzar*	**Lecture** Drug Toxicity 1 *Cenk Andaç*
12.00- 12.50	**Lecture** Insulin, Glucagon *İnci Özden*	**Lecture** Minerals *İnci Özden*	**Lecture** Pregnancy and Lactation *Mehtap Kaçar*	**Lecture** Endocrine Organs *Mohammed Elgazzar*	**Lecture** Drug Toxicity 2 *Cenk Andaç*
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Histology of the Female Genital System: Conducting Part *Alev Cumbul*	**Lecture** Seeing with Sound: Images from Echoes (Diagnostic Ultrasound Imaging) *Bilge Güvenç Tuna*	**ICP LECTURE** Intraarterial Blood Sampling *Mehmet Akif Öztürk, Özlem Durmuş Arın, Seha Akduman* **Group A**	**ICP LECTURE** Intraarterial Blood Sampling *Mehmet Akif Öztürk, Özlem Durmuş Arın, Tijen Alkan Bozkaya* **Group B**	**Elective Courses Week XII** / **IL**
15.00- 15.50	**Lecture** Development of Urinary System and Anomalies *Alev Cumbul*	**Lecture** Pharmacogenetics & Pharmacogenomics *Ece Genç*	*Mehmet Akif Öztürk, Özlem Durmuş Arın, Seha Akduman* **Group A** / **SRPC SGS Group D** *Deniz Kıraç*	*Mehmet Akif Öztürk, Özlem Durmuş Arın, Tijen Alkan Bozkaya* **Group B** / **SRPC SGS Group A** *Deniz Kıraç*	
16.00- 16.50	**Lecture** Vasoactive Peptides *Emine Nur Özdamar*	**Lecture** Pharmacogenetics & Pharmacogenomics *Ece Genç*			**II** / **Elective Courses Week XII**
17.00-17.50	**Lecture** **Lecture** Histamine and Antihistamines *Emine Nur Özdamar*	**Lecture** Prenatal Diagnosis, Teratology and Congenital Anomalies *Alev Cumbul*			

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
V.WEEK / 2 – 6 May 2022

<table>
<tr><th></th><th>Monday
2-May-2022</th><th>Tuesday
3-May-2021</th><th>Wednesday
4-May-2022</th><th>Thursday
5-May-2022</th><th colspan="2">Friday
6-May-2022</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="11">NATIONAL HOLIDAY</td><td rowspan="11">NATIONAL HOLIDAY</td><td rowspan="11">NATIONAL HOLIDAY</td><td>Independent Learning</td><td colspan="2">Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td>Independent Learning</td><td colspan="2">Independent Learning</td></tr>
<tr><td>11.00- 11.50</td><td rowspan="3">LUNCH BREAK</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>12.00- 12.50</td></tr>
<tr><td>13.00- 13.50</td></tr>
<tr><td>14.00- 14.50</td><td>Independent Learning</td><td rowspan="2">Elective Courses Week XIII</td><td rowspan="2">IL</td></tr>
<tr><td>15.00- 15.50</td><td>Independent Learning</td></tr>
<tr><td>16.00- 16.50</td><td>Independent Learning</td><td rowspan="2">IL</td><td rowspan="2">Elective Courses Week XIII</td></tr>
<tr><td>17.00-17.50</td><td>Independent Learning</td></tr>
</table>

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
VI. WEEK / 9 - 13 May 2022

	Monday 9-May-2022	Tuesday 10-May-2022	Wednesday 11-May-2022	Thursday 12-May-2022	Friday 13-May-2022
09.00- 09.50	**Lecture** Basics of MRI *Bilge Güvenç Tuna*	**Laboratory/ Anatomy** **Urinary System** *Mohammed Elgazzar* **Group 1**	**Lecture** Histogenesis and Nomenclature *Aydın Sav*	**Lecture** Perineum and Ischiorectal Fossa *Mohammed Elgazzar*	**Laboratory/ Anatomy** Female Genital Organs *Mohammed Elgazzar* **Group 4**
10.00- 10.50	**Lecture** Basics of MRI *Bilge Güvenç Tuna*	**Group 2**	**Lecture** Histogenesis and Nomenclature *Aydın Sav*	**Lecture** Review of the Urinary System *Mohammed Elgazzar*	**Group 3**
11.00- 11.50	**Lecture** Fetal and Neonatal Physiology *Bayram Yılmaz*	**Group 3**	**Lecture** Tissue Damage by Eating Disorders and Diabetes Mellitus *Aydın Sav*	**Lecture** Development of the Male Genital System and Anomalies *Alev Cumbul*	**Group 2**
12.00- 12.50	**Lecture** Endocrine Distruptors *Bayram Yılmaz*	**Group 4**	**Independent Learning**	**Lecture** Development of the Female Genital System and Anomalies *Alev Cumbul*	**Group 1**
13.00- 13.50	**Lunch Break**				
14.00- 14.50	**Lecture** Hormones Regulating Calcium Metabolism *İnci Özden*	**Laboratory/ Anatomy** Male Genital Organs *Mohammed Elgazzar* **Group 1**	**ICP LECTURE** Intraarterial Blood Sampling *Mehmet Akif Öztürk/Özlem Durmuş Arın/Seha Akduman* **Group C**	**ICP LECTURE** Bladder Catheterization *Arzu Akalın/Gökhan Gencer/Gözde Şen* **Group A**	**Elective Courses Week XIV** / IL
15.00- 15.50	**Lecture** Hormones Regulating Calcium Metabolism *İnci Özden*	**Group 2**	*Mehmet Akif Öztürk/Özlem Durmuş Arın/Seha Akduman* **Group C** / **SRPC SGS Group E** *Deniz Kıraç*	*Gökhan Gencer/ Arzu Akalın/ Gözde Şen* **Group A** / **SRPC SGS Group C** *Deniz Kıraç*	
16.00- 16.50	**Lecture** Hormones and Immunity *Gülderen Yanıkkaya Demirel*	**Group 3**			**IL** / **Elective Courses Week XIV**
17.00-17.50	**Independent Learning**	**Group 4**			

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
VII. WEEK / 16 – 20 May 2022

<table>
<tr><th></th><th colspan="2">Monday
16-May-2022</th><th colspan="2">Tuesday
17-May-2022</th><th>Wednesday
18-May-2022</th><th>Thursday
19-May-2022</th><th>Friday
20-May-2022</th></tr>
<tr><td>09.00- 09.50</td><td>Laboratory / Physiology
Dissection & Examination of Endocrine System
BY & MK & BGB
Group A1</td><td>Laboratory / Microbilogy
Virology
Güner Söyletir
Group A2</td><td>Laboratory / Physiology
Dissection & Examination of Endocrine System
BY & MK & BGB
Group D2</td><td>Laboratory / Microbilogy
Virology
Güner Söyletir
Group D1</td><td rowspan="2">Laboratory/ Physiology
Glomerular Filtration
Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</td><td rowspan="5">NATIONAL HOLIDAY</td><td></td></tr>
<tr><td>10.00- 10.50</td><td>Group B1</td><td>Group B2</td><td colspan="2">Laboratory
Histology of Urinary & Endocrine Systems
Alev Cumbul &Aylin Yaba Uçar
Group A</td><td></td></tr>
<tr><td>11.00- 11.50</td><td>Group C1</td><td>Group C2</td><td colspan="2">Group B</td><td rowspan="2">Laboratory/ Physiology
Metabolic Rate
Bayram Yılmaz & Mehtap Kaçar & Burcu Gemici Başol</td><td></td></tr>
<tr><td>12.00- 12.50</td><td>Group D1</td><td>Group D2</td><td colspan="2">Group C</td><td></td></tr>
<tr><td>13.00- 13.50</td><td colspan="6">Lunch Break</td></tr>
<tr><td>14.00- 14.50</td><td>Group A2</td><td>Group A1</td><td colspan="2">Group D</td><td>Laboratory/Pathology
Inflammation and Neoplasia
Aydın Sav</td><td>NATIONAL HOLIDAY</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td><td>Group B2</td><td>Group B1</td><td colspan="2">Group E</td><td rowspan="2">Laboratory/ Pharmacology
Efficacy and Potency Concepts
Ece Genç / Emine Ozdamar/Cenk Andaç</td><td rowspan="3"></td></tr>
<tr><td>16.00- 16.50</td><td>Group C2</td><td>Group C1</td><td colspan="2">Independent Learning</td><td>Independent Learning</td></tr>
<tr><td>17.00-17.50</td><td colspan="2">Independent Learning</td><td colspan="2">Independent Learning</td><td>Independent Learning</td></tr>
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IL: Independent Learning, CSL: Clinical Skills Learning, Student groups for laboratory/practice sessions will be announced by coordinators.

COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
VIII. WEEK / 23 – 27 May 2022

	Monday 23-May-2022	Tuesday 24-May-2022	Wednesday 25-May-2022	Thursday 26-May-2022	Friday 27-May-2022	
09.00- 09.50	**Independent Learning**	**Laboratory/ Anatomy** Nerves and Vasculature of the Pelvis *Mohammed Elgazzar* **Group 3**	**Laboratory/ Anatomy** Perineum and Ischiorectal Fossa *Mohammed Elgazzar* **Group 4**	**Laboratory/ Biochemistry** Urine Analysis *Jale Çoban &* *Müge Kopuz Alvarez Noval*	**ICP LECTURE** Bladder Catheterization *Arzu Akalın/Mustafa Yüksel/Pınar Tura* **Group B**	
10.00- 10.50	**Laboratory** Histology of Genital Systems *Alev Cumbul & Aylin Yaba Uçar* **Group A**	**Group 2**	**Group 3**		*Arzu Akalın/Mustafa Yüksel/Pınar Tura* **Group B**	**SRPC SGS** **Group D** *Deniz Kıraç*
11.00- 11.50	**Group B**	**Group 1**	**Group 1**	**Laboratory/ Biostatistics** Computer Applications of Tests of Significance *Çiğdem Keleş*		
12.00- 12.50	**Group C**	**Group 4**	**Group 2**			
13.00- 13.50	**Lunch Break**					
14.00- 14.50	**Group D**	**ICP LECTURE** Bladder Catheterization *Arzu Akalın/Cem Şimşek/Süleyman Orman* **Group C**	**ICP LECTURE** Bladder Catheterization *Arzu Akalın/Mustafa Yüksel/Pınar Tura* **Group D**	**ICP LECTURE** Bladder Catheterization *Gökhan Gencer/Arzu Akalın/Gözde Şen* **Group E**	**Independent Learning**	
15.00- 15.50	**Group E**	*Arzu Akalın/Cem Şimşek/Süleyman Orman* **Group C**	**SRPC SGS** **Group E** *Deniz Kıraç*	*Arzu Akalın/Mustafa Yüksel/Pınar Tura* **Group D**	**SRPC SGS** **Group B** *Deniz Kıraç*	*Gökhan Gencer/Arzu Akalın/Gözde Şen* **Group E**	**SRPC SGS** **Group C** *Deniz Kıraç*
16.00- 16.50	**Independent Learning**					**Independent Learning**
17.00-17.50	**Independent Learning**					

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COMMITTEE V – UROGENITAL and ENDOCRINE SYSTEMS
IX.WEEK / 30 May – 3 June 2022

<table>
<tr><th></th><th>Monday
30-May-2022</th><th>Tuesday
31-May-2022</th><th>Wednesday
1-June-2022</th><th>Thursday
2-June-2022</th><th>Friday
3-June-2022</th></tr>
<tr><td>09.00- 09.50</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td>Independent Learning</td><td rowspan="4">Independent Learning</td><td>Independent Learning</td></tr>
<tr><td>10.00- 10.50</td><td rowspan="4">Assessment Session (Anatomy, Physiology, Biochemistry, Microbiology, Pathology, Pharmacology, Biostatistics and Histology&Embryology Practical Exams)</td><td rowspan="4">Assessment Session Committee V
(MCQ)</td></tr>
<tr><td>11.00- 11.50</td></tr>
<tr><td>12.00- 12.50</td></tr>
<tr><td>13.00- 13.50</td><td colspan="4">Lunch Break</td><td>Program Evaluation Session
Review of the Exam Questions,
Evaluation of the Committee V
Program Secretary of the Committee</td></tr>
<tr><td>14.00- 14.50</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="4">Independent Learning</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>15.00- 15.50</td></tr>
<tr><td>16.00- 16.50</td><td rowspan="2">Independent Learning</td></tr>
<tr><td>17:00-17:50</td></tr>
</table>

STUDENT COUNSELING

Student counseling is a structured development process established between the student and the consultant that aims to maximize student success by focusing the student to her/his target. Although the major component of this relationship is the student, the faculties also take part by bringing the requirements of this interaction to their systems. The targeted outcomes of the consultant-student interaction are success in the exams, success in the program, and preparation for the professional life.

The aim of counseling is to help students to solve their problems, to give professional guidance, to provide coaching, to contribute to adopting the habit of lifelong learning, to provide information about the University and Faculty, to follow their success and failure and to help them select courses.

The consultants selected among Basic Medical Sciences instructors for the first three years transfer the students to Clinical Sciences instructors for the following three years.

The topics that will be addressed by the consultants are as follows:

a. Inform students about the university, faculty and surrounding facilities
b. Inform students about the courses and help them select courses
c. Inform students about the education and assessment regulations
d. Follow student's attendance to lectures and success
e. In case of failure, investigate the causes and cooperate with the students to overcome them
f. Help students in career planning
g. Contribute to students adapting the habit of lifelong learning
h. Guide students to counseling services of the university
i. Set a role model as long as the professional susceptibility, professional guidance, intellectual responsibility, interaction with peers, ethics, professional values are concerned
j. Contribute to cultivation of professional and intellectual development in a rapidly changing world
k. Inform the coordinator when there are unsolved problems of the students

Consultant-student relationship is a dynamic and mutual process carried out within the campus and the hospital. It is recommended that the consultant and the student meet at least twice during a semester.

The expectations from the student are as follows:

a) Contribute to improvement of satisfaction level in the problem areas

b) Report the social and economic conditions that require consultant's help

c) Specify expectations from the education and the department from which this training is taken

d) Give feedback on the counseling services regarding their satisfaction level

Student counsellors will be appointed after finalization of the class list and will be announced to the students. After the announcement of the counsellors on the information board, each student is expected to contact his/her counsellor until the end of the current committee.

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The student counseling lists are announced through the Google Classroom pages of the respective phase.

CONTACT INFORMATION

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